President's Column Mort McPhail

Summer in Houston started wet and is ending wet, with hot in between—sorta typical, though it seems wetter and hotter than usual. But the long hot summer hasn't stopped the work that our SIOP colleagues have been doing, and a lot has been going on this summer.

In the interim since my last column, APA held its 124th Annual Convention in Denver. SIOP's (as Division 14) contribution to the program included 13 sessions, on topics ranging from decent work to gender in the workplace and points in between, and two different poster sessions sponsored by SIOP. Many thanks go to Tara Behrend for her and her committee's diligent work and success in assembling such an accomplished set of presenters and top level presentations to share with our colleagues at APA. Additionally, members of SIOP presented at other poster sessions and appeared on the program outside of our particular block. Prior to the convention and at its close, our representatives to the Council of Representatives (Deidre Knapp, Georgia Chao, Lori Foster, and our newest representative Steve Stark, who stepped in for our other representative, Gary Latham, who was attending the International Congress of Psychology in Japan) met and dealt with a range of issues including finances, ethics, and governance. One issue of importance was a change that was made to the APA Ethics Code. In Standard 3.04 which deals with avoiding harm, Council voted to add a section that explicitly forbids psychologists from participating in torture, which is also defined. This action was taken partially in response to the controversies that have arisen (a long, complex, and difficult period in APA's history) regarding the involvement of some psychologists in the interrogations at Guantanamo following 9/11. The details of the events leading to this change are still being debated, and I can't get into them here, but the change itself, although not exactly the wording that our representatives might have preferred, was acceptable to us. APA has plans later this year to begin a formal review of the entire Ethics Code, and we will be working diligently to ensure that our voice is clearly heard in those discussions and debates. In other APA business, the Council received a report on the search for a new CEO for the Association; the search committee is cochaired by Rodney Lowman, so we can be sure that appropriate and valid selection procedures are being used. For more information about the work that our representatives do for us at APA, take a look at Deidre Knapp's article in this issue of TIP.

In early July, Past-President **Steve Kozlowski**, President-Elect **Fred Oswald**, Government Relations Advocacy Team Chair **Jill Bradley-Geist**, Research and Science Officer **Mikki Hebl**, and I met with our advocacy consultants in Washington to review our past year's efforts and to plan for the future. We are looking ahead to the implications of transition in the administration after elections this fall and will be preparing documents and strategy for us to consider and use in maintaining our efforts to achieve greater recognition and influence regardless of the election outcome. In addition, the Policing Initiative Working Group has continued its efforts. **Ann Marie Ryan** met with the Deputy Director for Community Policing Advancement of the Community Oriented Policing Services Office, which is part of the Department of Justice. The Deputy Director was very receptive to the contact, and we are working on ways to follow-up that will utilize I-O expertise and research. The Working Group expanded its membership to include **Cal Hoffman** (Los Angeles

Sheriff's Department), **Enrica Ruggs** (University of North Carolina, Charlotte), and **Amy Grubb** (FBI); Amy has agreed to serve as facilitator for the group. Given the tragedies and unrest that have continued to occur this summer, the need for SIOP to be able to provide evidence-based approaches to impact policing has never been greater. One of my goals for this year was to continue the work we are doing in this arena; the future of I-O psychology depends in part on the extent to which we can show the relevance and impact of our science and practice to issues that matter at a national level. The SIOP Policing Initiative provides one clear avenue where our expertise is highly relevant, we have a great deal of practical experience, and the scientific knowledge we have accumulated can be important in addressing what has rapidly become a national crisis.

In July I had an opportunity to attend a National Academies of Science, Engineering, and Medicine workshop on personnel selection in forensic science. The workshop was chaired by Fred Oswald and attended by several I-O experts: Winfred Arthur, Wendy Becker, Scott Highhouse, Andy Imada, Liberty Munson, Dan Putka, Ann Marie Ryan, and Nancy Tippins. I had the decidedly fun and easy task of introducing I-O psychology to a group of people who really wanted to learn about what we have to offer and then got to participate in the discussions and interact with a group of interesting and smart people. It was a great workshop, and work is underway to leverage it into action to assist the community of forensic science professionals.

I mentioned above that this has been a summer of tragedies across our country. On June 12th one of the worst mass killings in our history took place in Orlando. In an act of astonishing and horrifying violence an attack predicated on hatred at many levels—gender identity, race/ethnicity, and religious—took place at a gay night club, during a salsa celebration. As psychologists, we are pledged to the principle of **Respect for People's Rights and Dignity**, and we affirm that "Psychologists are aware of and respect cultural, individual, and role differences, including those based on age, gender, gender identity, race, ethnicity, culture, national origin, religion, sexual orientation, disability, language, and socioeconomic status" (APA, 2003, *Ethical Principles of Psychologists and Code of Conduct*, from Principle E, p. 4). We share the grief and pain of our LGBTQ and racial/ethnic minority colleagues created by this senseless act of violence. The LGBT Committee, chaired by **Katina Sawyer**, and the Committee on Ethnic and Minority Affairs, chaired by **Kisha Jones**, have been working on appropriate ways for SIOP to acknowledge our concern at the 2017 Conference to be held in Orlando, almost a year after this tragic event. Until then, I want all of our friends and colleagues affected by intolerance and violence to know that we stand with and support you.

There are a couple of things I want to remind you about that are happening even as I'm writing this column. First, the nomination period for Fellows has opened. If you know someone who deserves to be honored in this way by our Society, please consider submitting a nomination for her or him. If you have questions about the requirements for consideration for Fellowship, there is extensive information on the website; you can also contact **Kenneth De Meuse**, chair of the Fellowship Committee. Second, for those of you who are licensed practitioners, the Association of State and Provincial Psychology Boards (ASPPB) is conducting a job analysis that will form the basis for content validating updates to the Examination for Professional Practice in Psychology

(EPPP). If you receive the job analysis survey, please take time to complete it (if you are licensed and would like to participate, please contact **Mark Nagy** who is chair of the Licensing, Certification, and Credentialing Committee). Although we are small in numbers relative to health care providers, our input is needed to ensure that I-O content is appropriately represented on the examination.

This fall bodes to be as busy as the summer has been. In September, your Executive Board will meet in Chicago to carry out SIOP's business, and as usual, we have a full agenda. Then on October 21–22, the Leading Edge Consortium will be held in Atlanta. The topic is "Talent Analytics: Data Science to Drive People Decisions and Business Impact," and Alexis Fink and her team have put together a program packed with some of the most accomplished experts in this area. You still have time to register, and this is not an event you will want to miss. When I talk about the future of I-O psychology, this is one of the topics that continues to arise, and this year's LEC is right on target for helping us prepare for it.

It is easy to become swept up in the swirl of the everyday business of SIOP. Our members are constantly busy expanding our scientific knowledge and finding ways to apply it to real-world problems, and many of them are also finding time to plan our conferences, serve on and chair our committees, interface with our colleagues internationally and in other professional associations, build our budgets, manage our finances (thanks **Scott Tannenbaum**), staff our positions, and care for our members. Even so, I think we need to continue to focus on the future ahead of our profession. Our efforts in advocacy are part of this focus as are our participation here and abroad with the larger community of psychologists, but we are also looking at ways to become aware more effectively of the changes ahead in order to be able to proactively shape our own future. Looks like we're going to be even busier, and that's a good thing.

From the Editor

Tara Behrend

Analytics. Algorithms. Data Viz. Metrics. It seems like data are all anyone can talk about these days. And for good reason! This is the era of measurement, of prediction, of analysis. This issue of *TIP* has a few articles that directly address the theme of how we use and communicate data to others. Check out *Crash Course* for an introduction to Tableau, a popular data visualization tool. Feature articles from List and McDaniel, Cucina and Berger, and Mandelke et al. discuss various aspects of how we make decisions about data and what the consequences of those decisions are. There are useful bits of advice in here and also important questions to ask ourselves as scientists and practitioners.

Given this theme, I thought I should apply some of this measurement magic to *TIP* itself. I wondered, "How do people read *TIP*? Where do they read it? Will they use the new html format or should we offer other options too?" What better way to answer these questions than to take a

look at the data. Here's what the last issue of *TIP* looked like for the period between July 1 and August 15, 2016.

The most popular articles were:

- 1. MetaBUS: An Open Search Engine of I-O Research Findings
- 2. A Crash Course in I-O Technology: Crash Course in R
- 3. An Update of Landy's (1997) Psychology Family Trees
- 4. Call for Proposals for Updated Graduate Program Rankings
- 5. The Bridge: Connecting Science and Practice
- 6. I-Opener: Working 9 to 5, What a Way to Make a Living?
- 7. Licensing and Industrial-Organizational Psychologists: Member Needs and News
- 8. Lost in Translation: Communicating the Practical Value of I-O
- 9. Trans Issues in the Workplace 101
- 10. Learning About Learning: Defining the Role of I-O in L&D

Overall, the homepage received 2,261 unique visits, and unique individual article views totaled 5,842. *TIP* readers came from Abilene to Abu Dhabi and everywhere in between. The most popular day for reading TIP was July 5 (fresh from the holiday weekend, you started with the most important item on your agenda). But, new readers showed up every day through July and August. For the most part, people came to *TIP* from either google searches or direct links (e.g., emails). Less than 5% of visitors found *TIP* through a social media share or post.

Based on this preliminary look at the data, it seems that the new html format is working for some people. We'll keep working to make *TIP* an enjoyable and useful publication for everyone. Stay tuned for more improvements. In the meantime, thank you for all the terrific suggestions you have sent me so far. Keep them coming.

This issue of *TIP* has some challenging content in it. The authors are asking you to reconsider some of the basic assumptions of our field's status quo, in several ways. Gerard and Guzzo engage in an exchange about the possibilities of a critical approach to I-O. A number of articles discuss the prosocial efforts of your colleagues, in the realms of CSR, humanitarian work psychology, and refugee assistance. If you are a graduate student, form a discussion group with your friends and chew on these articles. You'll be glad you did.

While I am handing out advice...I have enjoyed speaking with you all over the last 3 months as I settle in to my new position here. Some of you, however, mistakenly believe that the position implies some kind of wisdom. You have been asking me for advice on matters I probably should not advise you on. But, I'm going to do so anyway. Welcome to the first installment of "The TIP Editor Gives You Questionable Advice."

Q: I met a famous I-O at a conference and I said something dumb to them! How can I recover?

A: Ah, yes. This reminds me of the time that, as a second-year grad student, I tried to explain IRT to Fritz Drasgow at a poster session. In my opinion, people should have to wear their nametags on their foreheads. But until that dream is realized, I suggest not worrying about it! We all say dumb stuff all the time. The key is to say a *lot* of stuff, so the dumb parts blend in with all the not-dumb stuff you are bound to say next time.

Q: My coworker won't stop talking about big data. What should I do?

A: You have a few options, including: making terrible "big" related puns, giving her a blank look and asking "what's big data?" or accepting that responding to broader societal trends is a good thing. We don't want to be sad, isolated, uninformed eggheads. We want to be savvy and useful eggheads.

Q: A job I want says it is looking for 5–10 years of leadership experience. I don't have any work experience, but I took a leadership seminar in grad school and it felt like it was 10 years long. Can I apply?

A: Yes, that seems fine.

Got a question for the editor? Email her at behrend@gwu.edu or tweet her @TaraBehrend.

A publication of the Society for Industrial and Organizational Psychology, Inc.

The Academics' Forum: What if We Took Unplugging Seriously in Academia?

Allison S. Gabriel University of Arizona

A new semester has started at the University of Arizona, which means I spent the past several weeks revising my syllabus. In particular, I was carefully writing my statement about why computers are *not* allowed during class time, which always creates quite a stir. Because I'm asked about this when I tell fellow academics that I do this, here's exactly what I say:

Abbreviated versions of the notes for each chapter are available on D2L. You are to print these notes and bring them to class to keep up with note-taking. Importantly, because these notes are made available to you, the use of computers is not allowed during class unless there is an exceptional circumstance that is approved by Dr. Gabriel. This is to create a positive classroom atmosphere of engagement, which cannot be achieved if half

the class is sitting behind a computer screen. Students who are caught using their computers will not only be asked to close their computers down, but also asked to leave class for the day.

I promise, you will be OK not using your computer for this class! In fact, it is likely going to help your grade. Don't believe me? Check out this research that shows how grades improve when students take notes by hand versus on a computer:

http://www.npr.org/2016/04/17/474525392/attention-students-put-your-laptops-away.

In this explanation (and as I discuss in my class), I reference work by Mueller and Oppenheimer (2014), which highlights that students who take notes by hand—compared to taking notes via their computers—have higher performance scores on conceptual questions. This is important for students in my Organizational Behavior class, as application-based and conceptual questions are the core of my exam content instead of questions that are more definition based.

When I introduce this topic in class, most students are accepting, but some of course remain resistant. In light of this resistance, I often try to crack jokes about how they will survive not having access to social media for the next 75 minutes and that an e-mail isn't going to come in that really, really needs to be addressed right that very second. I often get a few laughs, people save what they're working on and shut down their computers, and we move on. This decision hasn't hurt me in terms of any comments on my teaching evaluations (or, at least, I haven't seen anything yet thank goodness), and I have seen a noticeable difference in the level of participation in class and in their exam performance. Also, as I've written before in my columns, this is all happening in a really large section of almost 250 students.

Because it is the start of the semester, this also means a lot of catching up with colleagues about what we all were up to this summer. For me, Mike and I were in Tucson a lot, and this was largely by choice—we've lived in five different houses in three different states in the 4 years we've been married, and we decided that sticking around and having a low-key summer was well-deserved. We also were very fortunate to have several family members and friends from our respective hometowns visit us, so we didn't feel too bad about staying put. That said, Tucson gets really hot during summer (but, don't worry, it's a dry heat), and we decided that we wanted to take at least one vacation to have a change of scenery. Well, that's part of the story. The other part of the story of how we took our vacation was that I had insomnia one night during a revise and resubmit I was working on this past spring semester (on recovery no less) and decided to randomly book us a vacation at two o'clock in the morning. Luckily, I picked right, and it was a vacation both Mike and I really wanted to take: a week-long trip covering three national parks (Grand Canyon, Zion, and Bryce—all awesome and highly recommended), filled with as much hiking as we could get in.

It was on this trip that I truly realized how hard a time I have at unplugging, even though I make it sound so easy for my students when I tell them to put their computers, their iPhones, and so forth away. The revision I was working on that caused the bout of insomnia that led me to book our vacation was still going on prior to my trip, and the day before we left my coauthors and I received really positive feedback that necessitated another round of analysis checking to make sure we had everything perfectly finalized. I passed some work off to my (awesome) coauthors, put up my out-of-office e-mail, and set off on vacation, doing my best not to sit on my phone during the drive and just take in the Arizona scenery. But, it was really hard to mentally disengage. When you get feedback on a paper—good or bad—you want to work on it! It's how lots of us academics are programmed, and Mike let me have my moments of rambling about the paper in the car because he knew I was excited until I finally decided to shut it down.

Now, one way to force unplugging is to go on vacation somewhere that doesn't have cell phone reception, and that's exactly what happened throughout the majority of our time at the national parks. Honestly, I wanted to be unplugged, I really did. But, I still had my phone in my hiking pack at all times (for the iPhone Health app, of course) and assumed most of the time that there was no cell phone reception. However, there was one particular moment that made me rethink whether this was really letting me unplug. When hiking in Zion, Mike and I decided to tackle the Angel's Landing hike, which is harrowing to say the least (think steep drop-offs and chains to help pull you up [and stop you from falling over the edge]). It was an adrenaline rush, and incredibly hard, and the vast majority of the hike my mind was racing, focusing on where my next step was going to be. But, right at the top, at the very peak at the end of the hike, my cell phone reception must have clicked back in and I heard that all too familiar ping of my email going off. A large part of me was focused on the fact that we had just made it to the top (and hadn't plummeted off the edge—seriously, look up a video of this hike; we both agreed we would never do it again!), but a tiny part of me was still curious about what the e-mail was that came in. That moment made something really clear to me: even when I put up an out of office and I am physically out of the office, mentally I'm not. Maybe this isn't necessarily a bad thing—I really love what I do, and work often doesn't feel like work. But that doesn't mean it needs to always be present in my mind.

I kept my phone in my hiking pack for the rest of the trip (again—that Health app!), but this time, I kept it on silent. On the very last day of the trip when we went back to Zion and decided to hike The Narrows, the phones stayed in the car, and I really, truly went in unplugged, and not just because we were waist deep in water during the hike, but because we decided that we didn't need a million pictures, or any attachments to what was happening outside of Zion. It was great. Nothing exploded in my Inbox. It was OK that we didn't have a bunch of selfies to document the day (let's be honest—we can find pictures on the Internet). With my phone really gone, I didn't find my mind wandering as much as it usually did. You would think that I'd listen

to my own work about the importance of recovery, or my colleagues who research evening smartphone use (Lanaj, Johnson, & Barnes, 2014) or answering postwork e-mails (Barber & Santuzzi, 2015; Butts, Becker, & Boswell, 2015), but sometimes it takes one crystallizing moment to put things into perspective.

So, keep this in mind for next summer, or the next time you sneak off for a midsemester vacation: when your out-of-office is on, make it *really* on. I promise, your colleagues and coauthors (even ones like me that stay up thinking about revisions sometimes) won't be mad. If anything, they might thank you, because you are helping contribute to a culture where we as academics actually take out-of-office notices seriously and not just as a signal that you might be a bit slower to respond to e-mails. As for me? I'm going to take a cue from my students this semester and try to kick the plugged-in habit for good and not just on our next vacation.

References

- Barber, L. K., & Santuzzi, A. M. (2015). Please respond ASAP: Workplace telepressure and employee recovery. *Journal of Occupational Health Psychology*, *20*, 172–189. doi: 10.1037/a0038278
- Butts, M. M., Becker, W. J., & Boswell, W. R. (2015). Hot buttons and time sinks: The effects of electronic communication during nonwork time on emotions and work-nonwork conflict. *Academy of Management Journal*, *58*, 763–788. doi: 10.5465/amj.2014.0170
- Lanaj, K., Johnson, R. E., & Barnes, C. M. (2014). Beginning the workday yet already depleted?

 Consequences of late-night smartphone use and sleep. *Organizational Behavior and Human Decision Processes*, 124, 11-23. doi: 10.1016/j.obhdp.2014.01.001
- Mueller, P.A., & Oppenheimer, D.M. (2014). The pen is mightier than the keyboard: Advantages of longhand over laptop note taking. *Psychological Science*, *25*, 1159-1168. doi: 10.1177/0956797614524581

The Bridge: Connecting Science and Practice

Column Editors:

Craig Wallace, Oklahoma State University
Lynda Zugec, The Workforce Consultants
Mark L. Poteet, Organizational Research & Solutions, Inc.

The purpose of the "Bridge" column is to provide an additional conduit, building upon SIOP's current efforts, for connecting science and practice. The column strives to accomplish this by publishing various types of article content on the subject of science and practice integration; for example, case studies of effective practice; discussions between scientists and practitioners on a relevant topic, reviews of the key scientific and practical implications of a topic area; summaries of latest research findings and their implications for practice; summaries of key practice issues and their implications for needed research; and/or, calls for research to help practitioners overcome challenges associated with effective practice (please see Poteet, Zugec, & Wallace, 2016, for more background information on the column).

Exploring the Gap Between I-O Trends and the State of Research Tracy Kantrowitz and Eden King

Rapid developments in science and practice make it difficult to stay informed. In the past year, a variety of articles have been published in mainstream news outlets on topics such as mobile games for selection, the use of big data in HR, the state of performance management, and whether high-potential talent presents risks for organizations, without a firm perspective on the state of the science. Without this, mainstream articles like these leave us questioning whether they are informed at all by I-O research. If asked about these topics by your how equipped do you feel to speak to the science and research?

CEOs,

Despite our best intentions to stay informed, I-Os are often too busy doing our jobs to pick up or contribute to the latest scientific journals. This article fulfills these best intentions by boiling down some of the most important findings of recent years on trending topics in I-O. We highlight some examples of research/benchmarks that represent the state of the science and provide some commentary on how robust the research is on these topics. We also provide some ideas for how to stay current and thoughts on research/practice partnerships to shore up research on under-researched areas.

The Intersection of Trends and Research

We presented a preconference workshop at the annual conference this year on the intersection between trending topics in I-O and the state of the research. The top 10 workplace trends lists that SIOP has published for the past 2 years (http://www.siop.org/article_view.aspx?article=1343) provided us with a starting point for understanding what's top of mind for SIOP members and examining the extent to which these trends are supported by current research. In this regard, these lists are useful barometers for measuring ourselves as a science/practice community on how effectively we have pursued research programs that keep pace with trending topics. When we examined these lists, we noted practice trends and research findings that have synergies and misalignments. Here we offer a few examples of each to illustrate ways in which the relationship between science and practice might be maximally leveraged.

Opportunities

Mobile assessment. Mobile technology pervades nearly all aspects of existence and mobile-delivered assessment is no exception. In addition to minimizing costs and increasing speed and convenience for administrators and test takers, mobile assessment may also expand the size and composition of candidate pools. From a scientific standpoint, several questions have loomed large in terms of the psychometric considerations of mobile assessments. In general, research indicates that non-cognitive assessments show little evidence of score degradation for tests completed on mobile devices (e.g., Illingworth Morelli, Scott, & Boyd, 2014). Less research has been done on cognitive assessment and the research that exists has not produced consistent results. The evidence is also mixed regarding perceived fairness of mobile assessments. Kinney, Lawrence, and Change (2014) and Gutierrez and Meyer (2014) found no meaningful differences in perceived fairness across device type on noncognitive assessments. King Ryan, and Kantrowitz (2015) indicated candidates found it easier and felt they were given a better chance to perform when completing assessments on a computer as opposed to a mobile device. Early mobile assessments attempted to replicate computer based designs on smaller screens. The current momentum is pointing to strategies to redesign test questions that make better use of mobile screen real estate, use alternate item types outside of multiple choice questions, and allow for alternate ways of inputting responses (e.g., swiping).

Telework. Questions about telework pervade daily and strategic personnel decision making. Managers need to know for whom, how, and when telecommuting might be effective. Luckily, scientists have studied this issue in depth. Allen, Golden, and Shockley (2015) recently summarized this literature and offered specific recommendations. For example, Allen and colleagues

concluded that there are both positive and negative outcomes of telework, and that some people (e.g., those skilled in self-regulation) engaged in some tasks (e.g., those tasks that are independent, rather than independent) can telework effectively.

Other trending topics with burgeoning research programs include work-family integration, the use of social media for employment decisions, and multi-generation research. Much more work remains but it is promising to see studies published in prominent outlets on these topics.

Gaps

Assessing for potential. Organizations are increasingly interested in assessing for long term potential particularly for leader roles. To date, however, assessing for high potential has been fraught with more questions than answers. Most notably, defining high potential has been challenging as the "potential for what" question has been challenging to define. There is also a gap with understanding the most effective tools and methods of identifying and developing high potential talent. The literature provides some helpful benchmarks for understanding how organizations approach these issues, but little empirical research shows the effectiveness of various methods for achieving intended outcomes of preparing a new generation of leaders. Even more troubling is some evidence indicating that many organizations misidentify high-potential talent because they focus on which employees are performing well today. Shoring up the research on this topic and conducting longitudinal studies to track high-potential talent over time is clearly needed to address the gap between practice and science.

Diversity management. Another area where there is a gap between what practitioners need and what researchers are publishing is in the area of diversity management. Indeed, in her role as acting director of the Office of Personnel Management, Beth Cobert asked federal employees to combat unconscious bias. One of the primary strategies federal and private companies use to increase diversity and inclusion is diversity training. Yet a quick search for the term "diversity training" in the *Journal of Applied Psychology* yields a single hit in the 100 years of the journal's publications. Clearly, there is a misalignment between what organizations are doing and what is being published in I-O.

Ideas for How to Stay Current

Several resources are available to help stay connected to the latest research topics and findings. Most journals offer table of contents alerts, which are useful for keeping tabs on research topics and gaining access to the specific articles of most interest to you. SIOP also offers a number of research resources. For a nominal fee, the SIOP Research Access (SRA) makes multiple EBSCO

databases available to members. SIOP committees also publish several excellent white paper series. For example, the SIOP/SHRM Science of HR series, published by the Professional Practice Committee, has been very active in bringing the science of I-O to the HR community. These papers distill the latest and most impactful findings in clear and useful ways. The preconference workshops at the annual conference also bring the most current and pressing topics of interest to members to life through interactive learning experiences. On the flip side, several resources exist for researchers to become familiar with topics of interest to practitioners. The annual SIOP conference and Leading Edge Consortium highlight the latest thinking and issues facing practitioners. Practitioners are also very tuned into world and economic events that impact the organizations they work with, so staying plugged into business journals and periodicals like *Harvard Business Review* and *Wall Street Journal* can provide inspiration for timely research that should have direct application in practice.

Research/Practice Partnerships to Bridge Gaps and Exploit Opportunities

An ideal solution to build synergies between science and practice is through direct partnerships. This might take the form of sharing archival data, collaborating on new data collection opportunities, or directly engaging academic experts to inform practitioner needs. For instance, we have forged partnerships oriented around mutually interesting and beneficial research. Some research is better suited to data collection in academic settings that can't be feasibly done with organizational research partners (e.g., multisession studies to examine the reliability of a new measure over time). Likewise, academic-practitioner partnerships can help provide access to field samples that academic researchers may not normally have access to; these opportunities can help academic researchers generalize lab findings to the field and present improved opportunities for publication. Research partnerships can also be done exclusively in the practice domain. Consulting organizations may work with client organizations to participate in product development research that results in information to the organization about the efficacy of a new product while also providing the consulting organization with necessary data to develop and refine its new product. The precise way that partnerships are built is less important than building them in the first place; only by talking to each other can we learn where gaps and opportunities exist.

Calling Potential Contributors to "The Bridge: Connecting Science and Practice"

As outlined in <u>Poteet, Zugec, and Wallace (2016)</u>, the *TIP* Editorial Board continues to have oversight and review responsibility for this new column. Members of the Professional Practice Committee (PPC) and Scientific Affairs Committee (SAC) will identify content areas and format, secure authors and column participants, and assist with and review members' contributions to

the column. Although PPC and SAC members will actively recruit column contributors, we invite interested potential contributors to contact us directly with ideas for columns. If you are interested in contributing, please contact either Lynda (lynda.zugec@theworkforceconsultants.com) or Craig at (craig.wallace@okstate.edu).

References

- Allen, T. D., Golden, T. D., & Shockey, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. *Psychological Science in the Public Interest*, *16*, 40-68.
- Gutierrez, S. L. & Meyer, J. M. (2014, May). The mobile revolution: Measurement equivalence and mobile device administration. In T. Kantrowitz & C. M. Reddock (Chairs), *Shaping the future of mobile assessment: Research and practice update*. Symposium presented at the 29th Annual Conference of the Society for Industrial and Organizational Psychology, Honolulu, HI.
- Illingworth, J., Morelli, N., Scott, S., & Boyd, S. (2014). Internet-based, unproctored assessments on mobile and non-mobile devices: Usage, measurement equivalence, and outcomes. *Journal of Business and Psychology*, *30*, 25-34.
- King, D., Ryan, A. M., & Kantrowitz, T. M. (2014, May). Mobile and PC delivered assessments: Comparison of scores and reactions. Paper presented at the 29th Annual Conference of the Society for Industrial and Organizational Psychology, Honolulu, HI.
- Kinney, T.B., Lawrence, A., & Change, L. (2014). Understanding the mobile experience. Data across device and industry. In T. Kantrowitz & C. M. Reddock (Chairs), Shaping the future of mobile assessment: Research and practice update. Symposium presented at the 29th Annual Conference of the Society for Industrial and Organizational Psychology, Honolulu, HI.
- Poteet, M. L., Zugec, L., & Wallace, J. C. (2016, April). The bridge: Connecting science and practice. *The Industrial-Organizational Psychologist*, *54*(4), 18-23. Retrieved from http://www.siop.org/tip/april16/pdfs/bridge.pdf

Crash Course in I-O Technology: A Crash Course in Data Visualization Platform Tableau

Richard N. Landers Old Dominion University

This issue, I'll be digging into the daunting world of big data visualization – sometimes called "data viz." This represents one of the four major application areas of big data techniques to I-O psychology and HR, alongside data gathering, data storage, and data analytics (Landers, Fink & Collmus, *in press*). Importantly, I'm distinguishing data visualization in the big data sense (data viz) from data visualization in the traditional SPSS-ish sense. "Visualizing data" is something we've been doing for a very long time with histograms, scatterplots, pie charts and so on. Data viz, in contrast, is a specific type of data visualization, one that focuses on interactive exploration of highly complex datasets. When you create a scatterplot, you're trying to illustrate to someone the relationship between two variables. When you create a data viz, you're trying to empower the viewers of that data viz to explore whatever particular relationships they're personally interested in without much, if any, expertise in statistics required. In either case, the creator of data visualization must have expertise in both the subject matter being visualized and also in the art of visualization itself; historically, the training of scientists has focused more on the former, which may explain why scientists have not generally been very good at creating visualizations (Gelman, Pasarica & Dodhia, 2002).

A great example of data viz comes from visualization guru Evan Sinar who, as part of the SIOP Content Initiative, interactively visualized SIOP conference submissions between 2008 and 2016 and made the resulting data viz publicly available. Using this online tool, I can easily examine any subset of the conference data I might want. You may not be personally interested in checking Testing/Assessment submissions over time, but if I am, I can dial up that analysis myself and see it instantaneously. Despite this increased analytic power, my ability to order extra analyses does not unnecessarily increase the complexity of your or anyone else's experience interacting with the data viz. Every viewer ultimately has an individualized experience with precisely the data they want.

In these boom times for big data, there are myriad tools available for creating a data viz like this, but perhaps the most popular of these is Tableau, the brainchild of two computer science PhDs and an MBA graduate from Stanford. Tableau's mission, which you can view for yourself at http://tableau.com/about/mission, is one centered on accessibility of data. As they state, "we believe helping people to see and understand data is one of the most important missions of the 21st century. We proudly wear the mantle of 'data geek'" (Tableau, 2016). As an I-O psychologist, I find that this mission resonates a great deal with me. We often lament that I-O psychology is not taken as seriously as we would like, that I-O psychology's insistence on high-quality data is often drowned out by the siren songs of "consultants" with pretty PowerPoint presentations, all flash and no substance. We are the original HR data geeks! So if there's a data viz platform that is worth our attention, this is probably it.

Even if you don't see a need to adopt a data visualization platform yourself, this is a trend worth watching. Tableau and programs like it have been called "self-service business intelligence," which can be interpreted in terms of the Silicon Valley tradition of "disrupting" existing industries. Since I-O psychologists often (perhaps even "usually") practice in the area of business intelligence, this software is intended, in part, to automate and replace the job functions of I-O psychologists. If your job consists primarily of administering pre-existing surveys to employees and making standardized reports to summarize your findings, this software may be able to replace you – if not now, then soon. So if you're at risk, I'd particularly recommend learning Tableau to see what it is capable of and to ensure you still add value beyond what a VP of HR playing with this software in her office can do. As you learn, remember that this sort of platform is only going to become more powerful, more user-friendly, and less expensive as time moves forward.

In my interviews with I-O psychologists currently using Tableau, their emphasis was clearly on two outcomes: speed and client experience. Brett M. Wells, Chief Research Officer at Talent Plus, Inc., gave me a rundown of how his organization does it:

"With its interactive, real-time reporting, Tableau allows us to communicate data insights in more meaningful ways. Through this, we empower clients to answer their own pressing questions. What took days to gather, blend, clean and analyze seemingly disparate sources of data, now can be accomplished with a few clicks, and without the need of continually requesting time from a software developer and/or data scientist. For example, preparing for an executive meeting, the CHRO of a large health system can run a report to describe how recommendation and selection rates have varied across X variable."

Let's See It in Action

Tableau currently has six core products, and the one you will need depends on what you want to do with it. If you're just thinking about data viz for yourself and your own presentations, you want Tableau Desktop, which is a desktop application, like SPSS or R. The next two products, Tableau Server and Tableau Online, are essentially identical to each other. Both move Tableau visualization tools to the Internet so that you can create and share data viz via a web browser, and this can be done within your organization, for clients, or for the public. The key difference between Server and Online is that Server requires your organization to host the software, whereas Online is hosted on Tableau's servers (i.e., it is Tableau in the cloud). Tableau Public is a free version of Tableau Online that requires your dataset and your visualization to be publicly available; Public is thus intended for public-facing projects. See this Tableau Public visualization for example, which allows you to track home ownership by psychologists over time! The final product, Tableau Reader, allows people who don't license Desktop to view visualizations created by that program on their own computers. For the description below and the linked demonstration video, I'll be focusing on Tableau Desktop.

So what does Tableau actually look like? Unfortunately, the first time you open Tableau, you may find it a bit confusing – you are prompted to "connect" to a file, server or other data

source. It is here that you get your first glimpse of the perspective from which Tableau was designed, that of a computer programmer. You might ask yourself why you need to "connect" to a file rather than simply open one. The answer to that question actually reveals a bit about Tableau.

As I-O psychologists, we're accustomed to a particular technology workflow. We open a data file, work in that file, save that file, and close it to work on it again later. Tableau is not built this way in relation to its data sources. Instead, data sources are assumed to be live and changing things that Tableau should not modify. Instead, Tableau merely takes a snapshot of whatever data file you connect it to, manipulates that snapshot to accomplish whatever tasks you request, and then discards that snapshot once you're done for the day. When you open the program again, data sources are refreshed and your visualizations are recreated. Thus, this is a very different way of thinking about data than what you're probably currently accustomed to.

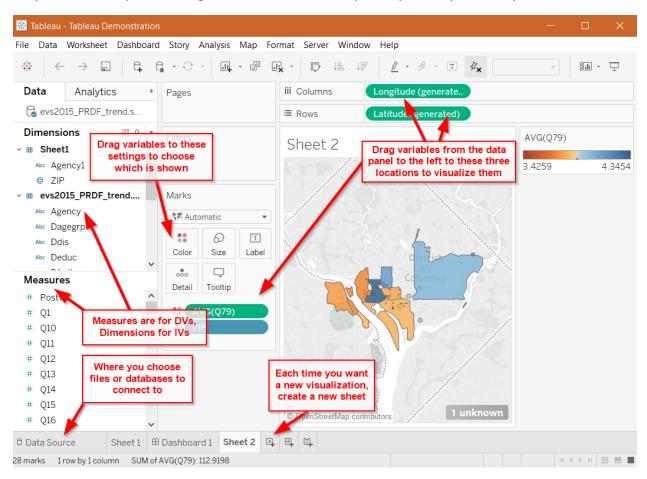


Figure 1. Annotated screenshot of Tableau.

Once you connect to a file, the experience doesn't get much better. In fact, Tableau doesn't seem to do anything at all. The secret next step is that you need to click "Sheet 1" at the bottom of the screen, which you can see in Figure 1. Once you have opened a Sheet, you finally gain access to Tableau's data visualization platform, and from this point, how to use this software becomes much more apparent.

To start, you'll want to check to be sure your variables appeared in the right places; specifically, any variable you want to summarize (usually DVs, typically interval- or ratio-level measurement) should appear as *Measures* whereas any variable you want to split your analysis by (usually IVs, typically nominal- or ordinal-level measurement) should appear as *Dimensions*. Tableau will take a guess, but it is not always correct. For example, in the demonstration video I created for this article, Tableau interpreted my Likert-type survey items to be nominal dimensions because they contained an "X" representing "Do Not Know" in addition to scores numbered 1 through 5. In such cases, simply click-drag the variable to the correct location. If your variables remain miscategorized, right-click on them to access a range of other settings.

Once your variables have been categorized correctly, you'll want to click-drag them to one of three places: Columns, Rows, or Marks. These are what they seem. For example, if you wanted to visualize the two-way interaction between Gender and Supervisor Status on answers to Q15, you'd probably drag both Gender and Supervisor Status to Columns, then Q15 to Rows. Tableau will guess as to the ideal visualization based upon the data types you've given it and where you've put them, creating a multi-bar chart, one bar for each unique combination of Gender and Supervisor Status. If you then wanted to break each bar up into pieces, with different colors by category, you'd drag that variable to Marks.

The most impressive visualizations that Tableau can create are undoubtedly geography-based. One such analysis appears in Figure 1. Here, I have given Tableau a list of ZIP codes and asked it to fill in the geographic area represented with that ZIP code with a color based upon its mean. ZIP codes with higher means (in this particular case, higher scores on a Satisfaction with Telework survey item) appear bluer, whereas ZIP codes with lower means appear more orange. Although you can see "Latitude" and "Longitude" in the Columns and Rows areas, these were generated automatically from the ZIP codes I provided, which Tableau recognized automatically. In fact, Tableau will automatically recognize a wide range of geographic signifiers, including area codes, city names, counties, countries, state names and city names.

Once your visualization design is complete, you progress to create a "Dashboard," which is essentially a snapshot of a Sheet designed to either be exported elsewhere or to be shown directly to a person of interest. "Stories" are a collection of Dashboards, intended to tell... well, a story. I generally found Sheets and Dashboards were all I needed.

To see these concepts in action, watch the demonstration video below.

https://vimeo.com/tntlab/iocrashcourse-tableau

So Who Should Learn Tableau?

Tableau is really designed to help people draw conclusions from data who have limited expertise in statistics, and that does not describe I-O psychologists. Given this, I believe its value to people like us is limited to a few particular circumstances:

- 1) Tableau is useful if you fully embrace the idea of exploratory analyses and would like to visually poke around a dataset quite quickly. If you think of yourself as a "visuals person," you will find this much more enjoyable than SPSS analyses.
- 2) Tableau is useful if you want to enable other stakeholders without significant statistical expertise (e.g., non-I-O members of your team, your clients) to explore complex data on their own, within parameters that you specify.
- 3) Tableau really shines when you have geographical aspects to your data that are too complex to easily understand using simple statistics (e.g., area codes, ZIP codes, states). For example, if you're pondering a 50-level one-way ANOVA to look at US state-by-state differences, you'd probably have a better experience and produce more useful conclusions skipping the ANOVA and interpreting your results using Tableau alone.
- 4) Tableau is very convenient if you have access to live datasets (i.e., datasets that are being constantly updated in an automated fashion) and would like to see what your data look like as they are collected.
- 5) Tableau is very effective at creating clean, attractive visualizations with very little effort. If you're visualization-challenged, Tableau makes the creation of informative, interactive visualizations quite simple.

Gonzalo Ferro, an I-O psychologist working for the government, made a compelling case to me:

I think being able to do data visualizations has really helped me do my job. I have been able to get my message across to high level leaders (head of an agency) much faster, and in a more credible way. It makes story-telling data much easier to do to non-data people. You see a lot of slick presentations out there, but the content is bad. You see great content, but the presentation is really boring and painful to watch. When you can do valuable/informative graphics, with important content, you become a value-added asset. I feel data visualization is an important skill for I-O Psychologists to have, because let's be honest, talking about a coefficient matrix and p-values is not that interesting." Implicit in his response, I think, is that Tableau enables you to create much more *interesting and interactive* visualizations than you would with SPSS or Excel alone. You don't need to be a graphic artist anymore to create something quite impressive.

A downside to Tableau is that there is no free version. If you want to try it out, you're limited to a 14-day free trial. However, <u>students and educators</u> can currently request yearly licenses for free. There are alternatives to Tableau, many paid and a few free, but in my experience nothing is quite so user-friendly and versatile, which are clearly Tableau's strengths. To get the same combination of features, you would likely need to combine the capabilities of several different programs. The closest you can likely get is that if you use R, <u>as I've recommended already</u>, you can use the library <u>ggplot2</u> to create quite impressive data visualizations and <u>Shiny</u> if you want to make them interactive. If you already use Excel or SPSS, you can also create most of Tableau's visualizations already (excepting the geography-based ones), although it can be a bit unpleasant to do so given the clunkiness of both of those programs. You also need to know exactly what figure you want to create before navigating many-level-deep menus to figure out how, which is a challenge the Tableau user interface solves quite effectively.

A downside to data visualization programs in general, including Tableau, is that it's quite easy to give *too much* power to a novice data explorer. As I-O psychologists, we all know the sampling error-related dangers of overinterpreting small subsets of data, but this is not obvious to someone who knows little about statistics. When you empower someone to drill deep into data, the personal data experience they have may not be one you want them to have, so a balancing act is required in designing data viz. Empower your viewers, but not too much; simplify the story told by the data, but *not too much*. There are no hard and fast rules for doing this (yet), so be cautious. If you're planning to show your data viz to someone important for your career, consider "testing" it on novices (i.e., friendly non-I-O colleagues) first.

To Learn More

Here are a few steps to get started in Tableau:

- 1) Download the free trial: http://www.tableau.com/products/trial
- 2) Next, "connect" to a dataset that you've analyzed before. Tableau will open Excel, SPSS and R data files, among many others, in addition to live database connections.
- 3) Click on Sheet 1 at the bottom of the screen.
- 4) Play with it. Start small.

No really! Tableau's primary selling point is that it's a highly intuitive way to explore data. Before trying any tutorials, spend a few minutes simply poking around a dataset that you already know and see what visualizations you can create. Don't be afraid if you specify something incorrectly; just use the undo button at the top, which looks like a left arrow. If you decide you want to learn beyond your own fiddling, try out Tableau's own *extensive* tutorial video series, found here: http://www.tableau.com/learn/training. There are seven *hours* of tutorials, if you really want to dig deep into what Tableau is capable of. If you want a faster answer to a specific problem, check the Tableau discussion forums or ask question tagged "tableau" on Stack Overflow.

After you get comfortable poking around Tableau, you might wonder just how impressive your visualizations can become. If you want to get inspired, I recommend watching this recording of the 2015 SIOP conference closing plenary session featuring Amanda Cox, data visualization expert at the New York Times. Almost every visualization she presents could be created in Tableau – assuming you have the data, of course.

As you explore your newfound skillset, I'll leave you with two recommendations. First, take advantage of pre-existing data sources. One of the most fundamental ideas from the big data movement is that data should be freely accessible and remixable to maximize its impact and value. Second, have fun. This is a great opportunity to get your data nerd on. For example, remember that impressive visualization of SIOP conference submitters by Evan Sinar that I mentioned earlier? Well, in just five minutes, I was able to extract the data Evan used from the website where he published it, import it into Tableau Public, and produce the data viz below (a dashboard) quantifying that same presentation list aggregated by first name. Why? Because from this, I can clearly tell that the Davids need to get working lest the Michaels run away with our conference. Those Testing/Assessment Michaels in particular. You're welcome, SIOP. And if that's not a compelling case for data viz, I don't know what is.

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Conclusion

That's it for the second edition of *Crash Course*! If you have any questions, suggestions, or recommendations about Tableau or *Crash Course*, I'd love to hear from you (rnlanders@odu.edu: @rnlanders).

References

- Gelman, A., Pasarica, C., & Dodhia, R. (2002). Let's practice what we preach. *The American Statistician*, *56*, 121-130. doi: 10.1198/000313002317572790
- Landers, R. N., Fink, A. & Collmus, A. B. (*in press*). Using big data to enhance staffing: Vast untapped resources or tempting honeypot? In J. L. Farr & N. T. Tippins (Eds.), *Handbook of Employee Selection*. New York, NY: Routledge.
- Tableau. (2016, August 18). *Mission | Tableau Software*. Retrieved from http://www.tab-leau.com/about/mission

The I-Opener: SPACE!

Harrison Wojcik University of Minnesota

./Steven Toaddy Louisiana Tech University





Greetings and salutations I-Opener readers both old and new! For this issue of *The Industrial-Organizational Psychologist*, Steven has been kind enough to extend his hand in partnership for the authoring of his column. Steven and I met this spring at the 2016 SIOP Conference in Anaheim, where we quickly realized we both had a propensity for the extra-terrestrial. Not the Spielbergian kind either—we're talking about SPACE!, which is exactly what we (unbeknownst to each other at the time) wrote on the backs of our business cards. Today we're going to blather on about why space is great and what's going on in space research. We'll end by giving you a couple of tips on how to get more involved.

If you find yourself thinking that you're not an astronaut nor do you have any inclination toward space or related research, you're not alone. The thing is, NASA has already changed your life for the better, without you even realizing it. Here is how it has changed mine: At 6:00 a.m. today I awoke to a familiar caustic tone as my phone buzzed and danced on my bedside table. As I rolled off my bed, I reached for my glasses out of habit before remembering that I had Lasik surgery 6 years ago. I turned off my horrendous phone alarm, checked the weather, then the traffic. Even as I dressed and slipped on my shoes, I was blissfully ignorant of how NASA funded the research and development behind the insoles in my shoes, the GPS satellites that let me check the weather and traffic, my eye surgery, and my memory-foam mattress. They may even someday invent a phone alarm that reliably wakes me up without instilling flashes of panic and rage.

When it comes to I-O psychology, NASA research will likely inform how we think about teams, their composition, and how to maximize their performance under extreme conditions. Their discoveries aren't just going to affect the function of teams or workers outside of the limits of Earth's atmosphere either; the lessons already learned are components that fit into our understanding of human functioning in general. They have the potential to improve the way that we both research and practice various aspects of I-O. If you work in or around high-pressure teams, for instance, what NASA is doing is likely helpful to your work.

Even if none of the above apply to you, there are advantages of NASA research that benefit just about everyone in the US, because, ultimately, this research results in an economic infusion of cold, hard cash. Returns on investments into NASA generate an estimated \$7-\$14 for each \$1 invested. Colonizing Mars will require new and lucrative technologies, but that's not the only fruit on this particular tree. For the ambitious and long-term strategists among us, there are asteroids worth approximately 5 trillion dollars (yes, that's trillion, with a "T") just floating around out there, ripe for the picking. Although money might not actually grow on trees, we're moving toward the next gold rush. How fortunate it is that I-O psy-

chologists have a unique opportunity to help bring it about. While everyone else focuses on moving people into space while keeping them physically healthy, space psychologists are focused on enabling astronauts to accomplish work in space without killing each other. If that sounds easy, just imagine you were forced to conduct science experiments with "that guy" in your office while trapped in a tiny metal box for 2½ years and you'll start to get the picture.

The thing is, we can't do our research in isolation. When we examine humans in analogue environments designed to mimic those of a space ship, or a base on Mars, we aren't just running one study at a time. There are many teams of researchers all working in parallel, all with their own surveys, inventories, monitoring systems, and experiments to have the astronauts run. Things get confusing. Communication breaks down. Fortunately, we are not without a way to progress, as there are themes upon which space researchers tend to agree. Steven and I discovered a couple this May during a virtual roundtable with representatives from multiple areas of space research. We sat down with Steve Kozlowski (professor, Michigan State University, past president of SIOP), Lauren Landon (research scientist, KBRwyle/NASA: Johnson Space Center), Wendy Bedwell (assistant professor, University of South Florida), Bryan Caldwell (physiologist, project manager, HISEAS), and Peggy Wu (senior researcher, SIFT) for a chat on how to get everyone pulling in the same direction. Paraphrased from comments made during the discussion, Dr. Kozlowski emphasized that current needs within I-O space research include more advanced methods to ameliorate the effects of small sample sizes, increased interdisciplinarity within the field, and standardization of measures being used in analogue research sites. Other topics discussed ranged from virtual reality and AI countermeasures, to behavioral protocols and countermeasures, to the logistics of preaching the gospel of space within SIOP.

Over the course of the discussion, two distinct themes emerged. First, participants agreed that there continues to be a need for further interdisciplinary coordination between and among psychologists and other researchers. Second, although there is already considerable research in progress, there is relatively low awareness outside of those directly involved. There is a consistent representation of space research at SIOP, but it is mostly at the presentation level. NASA has a tremendous volume of written material that they compile and review on an annual basis. Both of these research streams need to be made accessible and distributed to outside readership. We certainly had fun talking with such an esteemed group of researchers, and we even managed to identify some core issues germane to space oriented I-O research. However, there is much more to the field beyond what we discussed.

We've been studying humans in space since the early '60s when Yuri Gagarin became the first person to travel into orbit. There are published works in existence that detail the historical context of modern spaceflight and provide literature overview, one of which is a freely downloadable book called the <u>Psychology of Space Exploration by D. A. Vakoch, 2011</u>. It's clear that over the past 55 years we've learned a lot, but it's just a tiny fraction of the knowledge we'll need to send humans to Mars, be it for exploration, colonization, or to search for signs of life. Between us, the only time I'll ever find life on Mars is when I finally get up the courage to look for that candy bar that I lost under the couch 2 years ago.

Luckily for all us, the folks at NASA tend to be a bit more mindful about the kinds of research they do. NASA researchers have spent a great deal of time and energy creating what they call the "Human Research Roadmap" (HRR). Of their many research plans that span the vast breadth of science and technology, this one is most relevant to we I-Os, as it pertains to research on humans. They have compiled all the different ways in which humans might be affected by space travel. And when we say, "All the different ways," we mean, "All the different ways." There is an incredible amount of information here, and it can be intimidating for the uninitiated. Of the five primary areas within the HRR, we I-Os find ourselves primarily nested within that of behavioral health and performance, specifically examining the "risk of performance and behavioral health decrements due to inadequate cooperation, coordination, communication, and psychosocial adaptation within a team." Quite the mouthful. Each year NASA updates a report for the various areas of the HRR, and the 2016 evidence report on teams research, along with all other evidence reports, may be found at the HRR website. Basically, these reports provide the reader with the challenges associated with space travel, the ways that we can address them through various areas of research, and what each project has accomplished thus far. We won't attempt to summarize the extent of the research here, but those interested will find the reports digestible, engaging, and thorough.2

NASA does what they can to communicate the nonclassified aspects of their research to the public in other avenues as well. This August I had the pleasure of attending the APA national conference in Denver, where I was fortunate enough to attend Dr. Kelley Slack's plenary address "Behavioral Risks on Mars and Asteroid Missions." As a representative of NASA's Behavioral Health and Performance group, she spoke from the perspective of a hypothetical astronaut on his way to Mars through a series of journal entries. Each entry served as a relatable introduction to all the different ways the Behavioral Health and Performance group works to ensure that the Mars team returns safe and sound. Dr. Slack explained that the first step on our journey to Mars will be selecting a team. She estimated the current applicant pool to be around 18,000, which will be narrowed down to the lucky few chosen to matriculate into the astronaut corps. Then after years of additional training, some may come to represent the US in what is likely to be the most internationally collaborative effort in space history. Although she was careful to note that there have been no final decisions made, Dr. Slack suggested the Mars crew may be as small as six people! Once the Mars team is on their merry way, they will partake in as many anthropologically typical behaviors as possible, according to Dr. Slack. This means that the crew will do things that we see across all human cultures, such as sharing food together around a table, even if they are just squeezing their food from a bag.

There are I-O psychologists conducting new and exciting space-oriented research outside the walls of NASA as well as within. As noted on his Michigan State University faculty webpage, Dr. Kozlowski has centered his career on extreme-teams research and has lead space-oriented projects spanning several Mars analogue research facilities. He focuses on how team cohesion changes through time as part of his dynamic teams model. In order to better understand team dynamics, he has worked with Subir Biswas (professor of Electrical and Computer Engineering, MSU) and his team to develop an accurate and reliable sensor device to unobtrusively measure physiological signals and team interactions in real time.

Called the NeEWS Badge, this handy little device stands to revolutionize the way we observe, learn from, and improve the performance of teams.

Another such researcher is **Suzanne T. Bell** of DePaul University in Chicago. After a review of the many space-related investigations under her command as noted on her <u>DePaul University faculty site</u>, we tracked her down and exchanged a few emails. She was kind enough to allow us a sneak-peek at one of her latest projects: a novel, six-step methodological approach for studying astronauts and other teams that operate in extreme, high-stakes environments. Dr. Bell and her colleagues thoroughly describe the model in their recently accepted article in *Journal of Management* (now available as an advanced online publication). Their approach is designed to be adaptable for features specific to each study in order to produce research that can be used for context specific countermeasures to improve team performance. Although their method was developed with extreme teams in mind, it serves as a useful framework for creating actionable research in traditional teams as well.

Eduardo Salas is a name synonymous with team-training research, and although his mention might be last, it is certainly not least. He was recently honored with an APA Lifetime Achievement Award at their 2016 conference for his prolific contributions to research. During his address at the conference Dr. Salas mentioned that he had to be careful about the information he divulged, but he did suggest that he and NASA are partnering to examine the precise mathematics behind team composition modeling.

As we approach SIOP's 2017 conference in Orlando, we hope to provide the reader with an engaging look into this exciting field. Attending the conference's many³ space-oriented sessions would be a great way to get more involved. Particularly consider attending the SPACE! Community of Interest session on which we're working, which will be a great way to meet people and network, especially if you're new to the field. Opportunities are sure to abound for ambitious researchers, young and experienced alike. There is much more to space research than what we could cram into this column, so please, be on the lookout for future articles about space-oriented research in *TIP*. We don't have our next one quite ready; we need a bit longer to planet. Future topics may include Mars research analogues (places where teams of people are studied from 2 weeks to a year while living in tiny boxes under the ocean, on the sides of volcanoes, and in the Antarctic), new technologies, and previews of what the next SIOP will have to offer!

Harrison Wojcik works as a school psychologist in Minneapolis, MN. His love affair with space began at age 2 when his parents dressed him as an astronaut for Halloween. Interested readers may contact him at Harrison.wojcik@gmail.com.

Notes

¹Steven rant: Or perhaps not. Gold rushes were hugely profitable for very few and devastating for very many; perhaps this will be more of the next penicillin in its scope of impact on human well-being.

² How cool is that? Wouldn't it be great if we had one of those for other contexts, like if multinational organizations banded together and had a roadmap for their research needs? Alas.

³ I mean, probably there will be many of them. We're not quite sure yet.

The SIOP LGBT Committee and the Pulse Nightclub Tragedy in Orlando

The SIOP LGBT Committee
Steve Discont (Illinois Institute of Technology)
Ismael Diaz (California State University, San Bernadino)
Kristen Jones (University of Memphis)
Alex Lindsey (Indiana University-Purdue University Indianapolis)
Kenneth Matos (Life Meets Work Inc.)
Katina Sawyer (Villanova University)
Christian Thoroughgood (Villanova University)

At the time of this being penned, it has been 2 months and 12 days since an individual entered Pulse, a gay nightclub in Orlando, Florida, killed 49 people, wounded 53 more, and left LGBTQ people across the United States reeling. In place of our normal standing column, we are taking a pause in order to convey, as the SIOP LGBT Committee, that our hearts go out to Orlando's queer community as a whole, and especially to its queer Latin@ people. Nightclubs, for many LGBTQ people, are often one the few places where individuals can be authentic in the face of the discrimination experienced in their daily lives. An event like this has left cracks in the community's psyche, as it tells us that one of the few places LGBTQ individuals could be themselves is no longer safe.

At a time of such tragedy as this, even months after the terrible event, there are some options for aiding victims. For example, individuals might donate to charities such as the OneOrlando Fund (oneorlando.org), which was organized to assist the victims, who were injured or killed that night, and their families. If you wish to have an impact in your own state and city, we urge you to volunteer your time or donate to organizations that serve queer communities. On a more national level, organizations such as Out & Equal (outandequal.org), Lambda Legal (lambdalegal.org), and the National Center for Transgender Equality (transequality.org) are worth donating to if you wish to see your money have a more organizationally focused impact.

Finally, the SIOP LGBT Committee entreats upon all members of SIOP to fight heterosexism and transphobia when you encounter it. In this very politically charged time, discrimination against LGBTQ people is on the rise. In the United States, a country where it is still legal to discriminate on a federal level against people on the basis of their sexual orientation and their gender identity and preference, it is of the utmost importance that we as I-O professionals stand together, fight injustice, and spread love, equality, and safety in our families, organizations and communities.

Getting to Know SIOP's Award Winners Garett Howardson Tuple Work Sciences, Limited

Liberty Munson Microsoft Corporation

This is the second installment of the Getting to Know SIOP's Award Winners. The first installment, found here [http://www.siop.org/tip/july16/aw.aspx], profiled the work of Nathan T. Carter (University of Georgia), Dev K. Dalal (University at Albany, SUNY), Anthony S. Boyce (Aon Hewitt), Matthew S. O'Connell (Select International, Inc.), Mei-Chuan Kung (Select International, Inc.), and Kristin Delgado (Select International, Inc.) winning not one but two SIOP awards: The Hogan Award for Personality and Work Performance and The Jeanneret Award for Excellence in the Study of Individual or Group Assessment. In this second and latest installment, we profile Dr. Nathan Ainspan for his Raymond A. Katzell-award-winning work with service members and veterans of the U.S. military.

The Raymond A. Katzell Award



The Raymond A. Katzell award remembers the namesake's strong scientist–practitioner advocacy throughout his 27-year faculty tenure at New York University. A student of motivation and job satisfaction, productivity enhancement interventions and discrimination in employment testing, **Dr. Katzell's** scholarly expertise was amply applied to the practice of I-O psychology. His public outreach extended beyond his research, however, into leadership roles within several psychological organizations, including his roles as SIOP Fellow, past president, and recipient of SIOP's Distinguished Scientific Contributions Award. In addition to his SIOP roles, Dr. Katzell was a fellow of APA and APS. Clearly,

Raymond A. Katzell's work was far-reaching and benefitted greatly society.

Indeed, it was with this impact in mind that also SIOP Fellow **Kitty Katzell** established the Raymond A. Katzell award, which recognizes individuals exemplifying her husband's characteristics and work. More specifically, the Raymond A. Katzell Award in I-O psychology recognizes "a SIOP member who, in a major way, has shown to the general public the importance of work done by I-O psychology for addressing social issues, that is, research that makes a difference for people" (http://www.siop.org/SIOPAwards/katzell award.aspx).

The Awardee History

Since the award's 2009 inception, six SIOP members other than Dr. Ainspan have been honored for their society-benefiting, scientist—practitioner work. These recipients and their award-winning works are:

- 2009: Edward E. Lawler, III for, in addition to his extensive contributions to the scientific literature, communicating effectively this and related research to the general public. Among the titles bestowed upon Dr. Lawler for his public-facing work are one of the top six management gurus (BusinessWeek), one of human resource's most influential people (Human Resource Executive), and one of the century's top 25 visionaries shaping the modern workforce (Workforce Magazine). Dr. Lawler is a regular contributor to several additional media outlets including the Financial Times, Investor's Business Daily, News & World Report, and Forbes Magazine. http://www.siop.org/tip/july09/24awards.aspx
- 2011: Alice H. Eagly for her impactful prosocial research on gender dynamics in organizational settings, particularly with respect to women leaders. Dr. Eagly's research has earned her several accolades, not the least of which is the title of SIOP Fellow. She has also earned the 2009 Distinguished Scientific Contribution Award from the APA. In addition to her scholarly recognitions, Dr. Eagly has gained significant public recognition for her book *Through the Labyrinth: the Truth About How Women Become Leaders*, the research foundation of which was summarized in a 2007 *Harvard Business Review* article earning finalist honors and eventual second place for the McKinsey Award. Dr. Eagly's work has also been featured in *USA Today, Sacramento Bee, Wall Street Journal, Charlotte Observer*, and *APA Monitor*. http://www.siop.org/foundation/katzell11.aspx
- 2012: **Piers Steel** for his work on procrastination, which, culminating in the public-facing book *The Procrastination Equation*, has received recognition in several impactful popular press outlets, including the *New York Times*, *USA Today*, *Wall Street Journal*, *Toronto Globe and Mail*, and *Chicago Tribune*. http://www.siop.org/Foundation/katzell12.aspx
- 2013: William C. Byham for his highly communicable leadership works, including 23 books, over 200 monographs and articles, and hundreds of public presentations. Two of his works, however, have been particularly impactful: Zapp! and HeroZ. http://www.siop.org/Foundation/katzell13.aspx
- 2014: Benjamin Dattner for his work advancing public awareness of I-O psychology through, for example, regular appearances on NPR, quotations in *The New York Times, Wall Street Journal*, and *Harvard Business Review*, appearances on national television outlets, his book *The Blame Game*, and his many years of service on the SIOP Visibility Committee. http://www.siop.org/Foundation/katzell14.aspx
- 2015: **Tomas Chamorro-Premuzic** for expert psychometric work providing high quality and publically accessible *self-awareness* assessment tools, in addition to his wide-reaching publications in the *Harvard Business Review* and *Scientific American* and numerous other publications via social media, television, and radio. http://www.siop.org/Foundation/katzell15.aspx

Raymond A. Katzell Award Winning Work of Dr. Nathan Ainspan

Dr. Ainspan is currently a research psychologist at the Department of Defense in the Under Secretary of Defense for Personnel and Readiness, Transition to Veterans Program Office.

In his role, Dr. Ainspan is part of an interagency effort to better prepare U.S. service members for civilian life; for example, helping translate military skill sets into civilian competencies. More specifically, Dr. Ainspan works to support and substantiate the DoD's efforts in the military-to-civilian transition arena with research and best practices, as well as provide research-based recommendations for the Transition Assistance Program that every eligible service member participates in as they prepare to leave the military.

Despite Dr. Ainspan's relatively short 4-year tenure in this current role, his work improving service members' personal and work lives transcends nearly 2 decades.

Approximately 12 years ago, Nathan met Dr. Walter Penk, his then-future mentor, coauthor and coeditor on much of the work for which Dr. Ainspan received this award. Dr. Penk's pioneering vision was to use employment as a treatment for posttraumatic stress disorders. The prevailing consensus at the time was that service members should be as mentally fit as possible *before* entering the workforce. Dr. Penk's work inverted this paradigm and demonstrated, through empirical evidence, that employment *itself* was an effective posttraumatic stress treatment.

Nathan joined Dr. Penk on an 8-year journey extolling the virtues of employment for veterans' transitions to civilian life.

The Industrial-Organizational Psychologist A Transformative Experience

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After graduating with a PhD in Industrial and Labor Relations from Cornell University, Dr. Ainspan eventually found his way to the greater Washington, DC area working for the U.S. Department of Labor as a research analyst. His work focused on helping private organizations understand the bottom-line importance of a diverse and inclusive workplace, of which people with disabilities are an important part.

During an emergency evacuation planning exercise, Ainspan was instructed to ask any fellow coworkers who might require assistance how he might help them in the event of an emergency. Therefore, Dr. Ainspan appropriately asked his cubical neighbor—a Vietnam veteran injured in the war and a wheelchair user—how he could help assist in an emergency evacuation. Grabbing his wheelchair, Dr. Ainspan's colleague spun around, testing the weight of his computer monitor, and stated that he would throw the monitor through the window to create an immediate emergency exit. His colleague continued to say that Dr. Ainspan could then help by breaking away the remaining glass and pushing the wheelchair through the newly created exit.

It was only after a deadening pause that the situation became clear. Dr. Ainspan had assumed his colleague—a combat-experienced veteran of the Vietnam war—would require assistance in the event of an emergency. In reality, Dr. Ainspan realized that the reverse would be true and

that the person most likely to receive help in an emergency would be *him*. His disabled colleague was the one who possessed a unique, irreplaceable, and highly *enabling* skillset acquired through years of military experience.

It was this message that was to fuel Drs. Ainspan and Penk's future work including several SIOP conference presentations. The 21st Annual SIOP Conference held 2006 in Dallas, Texas, however, was perhaps the most impactful.

Continuing the Work

Arriving in Dallas, Dr. Ainspan prepared for his 2006 SIOP conference presentation armed with a simple message: Veterans already possess many of the individual characteristics organizations prize. In fact, the U.S. government purposefully invests millions of taxpayer dollars to ensure this is precisely the case. Better tapping into this talent pool, said Dr. Ainspan, was a critical problem for I-O psychology. Well received, Dr. Ainspan's work continued at subsequent SIOP conferences and even expanded into APA full-day continuing education sessions, which had been offered for five contiguous APA conferences. Based on this work. Dr. Ainspan has edited three books, including the 2012 When the Warrior Returns: Making the Transition Home. More recently, Dr. Ainspan has also edited the 2016 Handbook of Psychosocial Interventions for Veterans and Service Members: A Guide for the Non-Military Mental Health Clinician. He is currently in the process of editing a book (with many SIOP members contributing chapters) written for HR leaders and I-O psychologists on how to hire and retain veterans in civilian companies.

Ine Industrial-Organizational Psychologist

A publication of the Society for Industrial and Organizational Psychology, Inc.

To be sure, Dr. Ainspan's work with service members has benefitted society at large and is well deserving of the Raymond A. Katzell award. Such work, however, is far from done. Indeed, it is his current TVPO work that Dr. Ainspan believes will expand veterans' workforce roles even further. One specific focus within this work is, for example, helping service members to better articulate their actual knowledge and skills. Why, one might ask, is this not something service members currently do? As Dr. Ainspan reminds us, such knowledge and skills are not unique in the military; it is expected that *everyone* have these characteristics. Indeed, the U.S. military's goal is to make such knowledge and skills second nature. Asking a service member to describe such knowledge and skills would, therefore, be akin to asking a fish to describe water.

Through his TVPO work, however, Dr. Ainspan hopes such miscommunications will become a thing of the past. One recent example of such work commissioned by the TVPO was the collaboration between Dr. Ainspan (the primary point of contact) and fellow SIOP member and RAND researcher **Dr. Chaitra Hardison**. In broader conjunction with a research project commissioned by TVPO to the RAND Corporation, Drs. Ainspan, Hardison, and other colleagues worked to measure and translate the nontechnical but essential skills (e.g., communication) service members acquire in the military. Ideally, such research would help ease communication between private organizations and military service members. Although such advancements take time,

Dr. Ainspan encourages us all to recognize the highly unique knowledge and skills acquired through highly unique military experiences.

On a Lighter Note

He, who laughs most, learns best. – John Cleese

It might surprise you to learn that John Cleese, the famed *Monty Python and the Holy Grail* and *Life of Brian* star, is trained in law and chemistry, holds two master's degrees, and has even taught courses at Cambridge University. For these reasons and others (e.g., experience teaching human resources), Cornell University considered inviting Cleese to be an honorary faculty member. Wanting to be a part of the application process, Cornell students approached then-Cornell graduate student Dr. Ainspan to write a Cleese's recommendation letter. Dr. Ainspan had received a copy of the *Python* actor's accomplished resume but was nevertheless uncertain what to write. A well-timed midnight screening of *Life of Brian*, however, provided the necessary inspiration and insight.

Immediately upon arriving home, Dr. Ainspan began the letter that would eventually help secure John Cleese's role as a visiting Cornell professor of, among other topics, human resources (Dr. Ainspan even got to have lunch and talk to the now Professor Cleese when he first visited the Cornell campus). His visits to the campus as an honorary professor were so well appreciated that when the term of the honorary professorship expired, Cornell immediately offered him a permanent honorary position with the faculty, which he maintains nearly 20 years later. Perhaps unsurprisingly, Dr. Ainspan's response when asked for a fun personal fact is simple and consistent. "I helped the guy from *Monty Python* get a teaching job at an lvy League school."

Garett Howardson is currently principal work scientist at Tuple Work Sciences, Limited. Most of his work focuses on quantitative, psychometric, and/or computational issues to better understand the psychology of modern, technical work writ-large (e.g., aerospace technicians, computer programmers).

Garett is also an avid computer geek. In fact, he has a degree in computer science, which he avidly applies to his research and work in pursuit of one deceivingly simple goal: better integrate I-O psychology and the data/computational sciences to understand work.

Liberty Munson is currently the principal psychometrician and Assessment and Exam Quality lead at Microsoft. She is responsible for ensuring the validity and reliability of Microsoft's certification and degree programs. Her passion is for finding innovative solutions to business challenges that balance the science of assessment design and development with the realities of budget, time, and schedule constraints.

Liberty loves to bake, hike, backpack, and camp—basically, if the sun is shining you'll find her enjoying the great outdoors; if not, she's in her kitchen tweaking some recipe just to see what

happens. She has also been actively involved in editing *The Microsoft Cookbook* to raise money for a local charity, FareStart, as part of Microsoft's Give Campaign. Also, she just got a new mini schnauzer puppy, Apex!

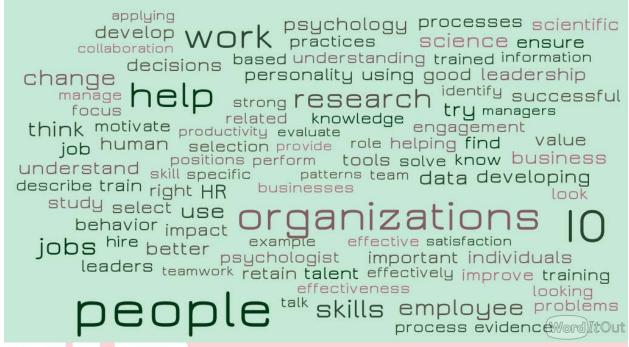
Lost in Translation: Practical Recommendations for Communicating the Value of I-O psychology

Lost in Translation is an eight-part TIP series designed to help I-O psychologists translate their knowledge and experiences into actionable behaviors that can easily be understood by those unfamiliar with the field. Each column will focus on a new topic within I-O psychology that may be difficult to effectively communicate in the field. Our goal is to provide practical recommendations for graduate students, early career professionals, and/or any I-O psychologist hoping to increase their day-to-day effectiveness at work. To achieve this, we are conducting a series of surveys and interviews within SIOP community and relaying the advice and experiences of I-O professionals to you, the SIOP community and TIP readership. We plan to maximize the use of TIP's innovative new html formatting by providing interactive polls, graphics, and embedded video interviews.

In the introductory column of *Lost in Translation*, we discussed the rationale behind the series, shared video interviews from some of the most prestigious names in the field describing their own 'lost in translation' incidents, and revealed our own personal experiences in which we failed to effectively translate I-O topics to unfamiliar audiences. Since our first column, we have been overwhelmed by the outreach of support and offers to contribute from members of the SIOP community! Please keep them coming. You can reach us at LostinTranslation.TIP@gmail.com if you would like to contribute, comment, or submit an idea for upcoming issue. A publication of the Society for Industrial and Organizational Psychology, Inc.

The second article in the *Lost in Translation* series consolidates practical advice from I-O professionals who are effective translators. More specifically, we conducted in-person and virtual interviews and sent a web-based questionnaire designed to understand how a wide variety of I-O professionals approach, implement, and master the art of translation in the workplace and other environments. This advice was transcribed and coded from 25 responses to these interviews, and the practical recommendations fell under two higher-order themes: **Preparing for Your Translation Experience** and **Translating I-O Psychology in the Field**. The practical recommendations related to these themes and the five subthemes that emerged are described in greater detail below.

In addition to requesting advice on how to effectively communicate the value of I-O psychology to unfamiliar audiences, we asked our respondents to describe how they explain what I-O psychology is and the value that I-O psychology brings to organizations in terms that anyone can understand. Selected responses from members of the SIOP community can be viewed in the video below. Additionally, because not all of our respondents were available for video interviews, we created a Wordle graphic using all 25 respondents' answers to these two questions. In these graphics, word size is used to indicate the relative frequency of words appearing in the response set.



The remainder of the article is dedicated to best-practice recommendations from our respondents and is divided into five parts. First, we present a high-level summary of the methods we used to analyze interview responses and how we came to agreement on the emergent themes and subthemes. Second, we define each of the five subthemes and related dimensions, and provide an exemplary quote that encapsulates the spirit of the theme. Third, we provide a table containing the relative frequencies of each theme and subtheme. Fourth, we provide a table with the condensed practical advice obtained from our I-O respondents. Finally, we close this column by touching on a handful of conflicting responses and present an interactive poll designed to gain the perspective of the larger I-O community.

Method

Sample

In total, 25 I-O psychologists (14 men, 11 women) were interviewed for the current article. Our sample consisted of 14 practitioners (7 internal and 7 external consultants), 3 applied researchers, 4 university professors, 1 postdoctoral researcher, and 3 graduate students who were interning with external consulting companies.

Procedure

Using Consensual Qualitative Research Approach (e.g., Hill, Knox, Thompson, Williams, Hess, & Ladany, 2005), each of the two authors independently developed our own themes and coded each response (N = 84). We then met together and determined that our codes could be consolidated into two overarching themes, five subthemes, and the dimensions comprising the subthemes. We once again independently coded each response under the new scheme, reaching a

92.9% agreement. Through discussion, we resolved the discrepancies to come to 100% agreement on all items.

Translation Experience and Translating in the Field. The Preparation general theme consists of practices and strategies that I-Os can do ahead of time, either at home or on the job, to prepare for a specific translation context or to generally improve translation skills. This theme was characterized by three primary subthemes: *Understand Your Audience, Test on Difference Audiences*, and *Learn From Others*. The In Practice general theme consists of practices and strategies that I-Os can utilize during communication in the field. Two subthemes emerged: *Simplify the Presentation of Information* and *Maintain an SME Mindset*. Each of the six coding discrepancies that occurred were related to *when* the recommendation would be implemented. For example, learning the language of business would fall under the Preparing for Your Translation Experience theme, whereas simplifying the presentation of information by using business language fell under the Translating I-O Psychology in the Field theme. See below, for definitions and exemplary quotes for each theme, subtheme, and related dimensions.

https://www.youtube.com/watch?v=NbHSAcladvQ

https://youtu.be/dIEw0p1e5nA

Results

The table below details the frequency of subthemes and dimensions (Hill et al., 2005). It is worth noting that frequency does not necessarily indicate the importance of each subtheme, however, the frequency does represent the percent of interviewees who mentioned the respective theme when providing advice on translation. As noted in Table 1, *General* themes were mentioned by at least 90% of the interviewees, *Typical* themes were discussed by at least half of the interviewees, *Variant* themes were mentioned by less than 50% of the interviewees, and *Rare* themes were mentioned by only two or 3 respondents.

Table 1
Subtheme and Dimension Frequencies

Preparing for Your Translation Experience	
Subtheme	Frequency*
Dimension	
Understand your audience	General
Needs, goals, and problems	Typical
Language	Variant
Culture and values	Variant
Decision makers	Rare
Organizational characteristics	Rare
Test on Different Audiences	Typical
Family and friends	Variant
Non I-O colleagues	Variant

Self	Variant
Social media	Rare
I-O network	Rare
Learn from Others	Typical
I-O peers	Variant
I-O experts	Variant
Non I-O professionals	Variant
Mentor	Rare
Translating I-O Psychology in the Field	

Translating I-O Psychology in the Field	
Simplify Presentation of Information	General
Value of I-O psychology	Typical
Research	Typical
Results	Typical
Maintain SME Mindset	Rare
Creative I-O applications	Rare
Self-efficacy	Rare

Note: *General > 90% of respondents mentioned the theme, Typical > 50% of the respondents mentioned the theme, Variant < 50% of the respondents mentioned the theme, and Rare < 10% of the respondents mentioned the theme.

The Industrisubthemes nizational Psychologist

1. Understand Your Audience

<u>Definition</u>: Prepare for your translation experience by understanding all of the different aspects that make your audience unique.

Needs, goals, Assess your audience's situation and/or problem. Evaluate and address needs, or and problems gaps between current conditions and desired goals.

Language Understand the language, terminology, acronyms, or metrics that resonate with

your intended audience.

Culture and Appreciate the set of values, norms, guiding beliefs, and underst

Culture and Appreciate the set of values, norms, guiding beliefs, and understandings that are values shared by members of the organization or intended audience.

Decision mak- Understand the organizational structure, with a particular emphasis on hierarchical authority and decision-making power.

Organizational characteristics

Consider the organizational domain, industry, strategy, size, and market of your intended audience, and its environmental influences.

Exemplary Quotes:

I always try to, in almost any situation, to put myself in the other person's shoes. So it's always sort of that perspective-sharing I think that's important to say "what's important to them?" or "what are the things they are trying to get out of this dialogue, or this meeting, or

this consulting arrangement," and the more that I don't focus on myself but try to focus on the other person, I found that's helped a lot.

Understand the audience, their goals and what they value and the communication culture of the organization. One of the most important lessons I learned early career was to tailor [your message].

You need to have in-depth conversations with your internal champion and figure out how the work needs to be positioned and communicated in the organization.

Let the client talk a lot at first. Really understand their organization, their goals, and their problems. By doing this you are setting up a way to provide well informed solutions... Really listen to all questions. The content of the question itself may illuminate something previously unknown, and ask your own questions, and plenty of them. "Trivial" information isn't always such.

2. Test on Different Audiences

Definition: Practice your translation skills in front of various, nonthreatening audiences (both those familiar and unfamiliar with I-O) and ask for feedback.

Family and	Test your translation skills on family members, friends, and community group
friends	members.
Non I-O col-	Practice translating I-O concepts to colleagues within your organization or depart-
leagues	ment who are not familiar with I-O psychology.
Self	Practice on your own, out loud, or in front of a mirror.
Social media	Test your translation skills through the use of social media (e.g., LinkedIn, Twit-
	tion of the Society for Industrial ander) ganizational Psychology Inc
I-O network	Deliver your "translated message" to other I-O psychology graduate students,
	practitioners, and academics in your professional network.

Exemplary Quotes:

Test explanations out on family and friends before using them with clients—they are more likely to tell you what they don't understand than clients

Actually say it out loud—don't just think about. Things come out differently when you say them than when you just think about it.

Always think through a few ways of explaining a difficult I-O concept before you present to a nontechnical audience. Be prepared for people to not understand you.

3. Learn From Others

Definition: Observe and learn from others who are skilled at translation.

I-O peers Pursue assistance from your network of I-O professionals, including col-

leagues/peers.

I-O experts Actively modeling the behavior of senior I-O professionals in your organization or

experts in the field of I-O psychology.

Non I-O professionals Mentor

Learn from experts and professionals outside of the field of I-O psychology.

Actively seek help from a formally assigned or informal mentor or advisor.

Exemplary Quotes:

Read the 10 Day MBA (or similar) and learn to talk business instead of psychology. Read exec summaries of the latest business books so when an exec asks about it, you can say, "Yes, we do that and here's how," or you can gently steer them away from unproductive or harmful trends.

One thing I tried to do on a recent consulting project was partner with a more senior colleague who had been communicating I-O concepts to non-I-O audiences for most of their career.

Listen to how others describe the field or technical concepts and observe how others respond. When it seems that people followed well, take note of how it was explained. When it seems that people are struggling to keep up, spend some time after the interaction on your own and think about how you would have explained it differently.

4. Simplify the Presentation of Information

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Definition: Present I-O concepts, topics, research methods, and findings in a manner that can easily be understood by any audience.

Value of I-O Effectively communicate the value of I-O psychology, or any of the specialized toppsychology ics within the field (e.g., selection, training).

Translate social science research in a way that communicates the methodological rigor, appropriateness, and importance in a way that any audience can appreciate.

Results Ensure written, verbal, and/or visual presentation of organizational research findings are easily understood.

Exemplary Quotes:

Research

I'll give an example. I used to work with somebody who had a PhD in Economics, and she did extremely complicated work underneath the hood, and when she talked to executives, it was "Green means Go, Red means No Go, Yellow means Proceed with Caution," and I'm sitting there going, you worked for weeks on the algorithm and you give them a one-pager that says, "Stoplight?" and she goes, "yes, if they want more information, I've got it. I'll make it available for them. But all they want to know is, 'what's the decision here?'"

People can relate to pictures very easily... your audience should be able to grasp what you're talking about in 3 seconds or less... so particularly for politically sensitive topics, where people

are highly motivated to misinterpret what you're saying, using a compelling diagnostic that's visual in nature, kind of makes it inarquable.

It's really about providing stories, and analogies, and examples, so in some cases I even use sports analogies for the work I do with teams. Being able to say, here's the data, and here's an example of what we saw in a work setting, and here's an example of what we learned from a sports setting, and for other people that resonates with them enough that they're able to buy into the research.

Become a pro with analogies and metaphors. This skill may come more easily to some, but it is a must when responding to guestions on the fly.

5. Maintain an SME Mindset

Definition: Realize that your thorough education and deep understanding of I-O psychology makes you a Subject Matter Expert

Creative I-O applications

Adopt an open-minded approach to the translation of I-O psychology in practice (e.g., be flexible, adaptive). Tailor content to your audience's situation or level of expertise.

Self-efficacy

Uphold a belief in your abilities as an I-O expert and as an effective translator.

Exemplary Quotes:

Trust yourself. This isn't article group or your orals. When someone asks you a question, it is typically because they don't know or don't understand. They are not trying to trip you up or suggest you aren't competent. Remember, you are the SME! Have the confidence to get creative with what you learned in graduate school so that you can do things aligned to the goals of your organization in a way that best fits the particular project you're working on. Don't think each process you learned in graduate school only has one application.

Realize that you are an expert and have a very specialized/technical knowledge set. For the last 4+ years you have been surrounded by other experts in the field of I-O psychology. That may NOT be true of the environment you are about to find yourself in.

Table 2 Practical Recommendations by Subtheme

- radical recommendations by careful			
Preparing for Your Translation Experience			
<u>Subtheme</u>	Practical recommendations		
Understand Your Audience	 Think of the situation from your audience's perspective. What is important to them? What are they trying to achieve? Do not make any assumptions about what your intended audi- 		
	 ence will know or understand. Learn the basic business metrics that resonate with your audience. Ask questions and practice active listening. Read the annual report for the organization you are going to work with to understand their culture and values. 		

- Listen to how people in the organization use language and terminology and mirror them as much as possible.
- Have in-depth conversations with your "internal champion" to understand how the work needs to be positioned and communicated in the organization.
- Identify decision makers and key organizational members. Tailor your message to their needs to obtain buy in.

Test on Different Audiences

- Practice translating your message in low stakes situations and in as many contexts as possible.
- Write out and rehearse a personal elevator speech that describes your intended message.
- Create a personal blog or extended form post (e.g., LinkedIn) that reaches a broader audience.
- Practice delivering your message in front of a mirror. Say it out loud and revise as needed.
- Ask non I-O colleagues to review for clarity and provide feedback.
- Test out your explanations on family and friends before using them with clients. If they ask insightful questions, you are translating well.
- Be prepared for your audience to not understand you. Always think through a few ways of explaining a difficult I-O concept before you present to a non-technical audience.
 - In preparation for a translation experience, think about how you would explain what you do to your grandmother and use that approach when talking to non I-Os.

- Read business periodicals (e.g., Wall Street Journal) and books (e.g., 10-Day MBA) to understand the language of business.
- Partner with a formally assigned or informal mentor who you are comfortable with. Ask questions regarding his or her best practices when translating and obtain feedback about the effectiveness of your message.
- Listen to how experienced colleagues describe the field or technical concepts and observe how others respond. Mirror the language and terminology that he or she uses, but also think about how you could explain it differently.
- Learn from experts both within and outside of I-O psychology. Attend professional talks and seminars that are designed for broader audiences to observe how messages are communicated to others.
- Graduate students: Obtain an internship to gain experience translating while you are still in school.



Translating I-O Psychology in the Field

Subtheme

Simplify Presentation of Information

Practical Recommendations

- Translate the results of a study into numbers that are easily understood, such as percentages, odds, or risk ratios.
- Use analogies, metaphors, and engage in narrative storytelling to explain the value of I-O.
- Be prepared to discuss easy-to-understand, evidence-based examples that explains why the work you do matters and where it has made a difference. Take a moment to explain the "so what?" so the audience understands the value.
- Oversimplify what you do, and be prepared to get more technical if your audience requires it.
- Have an elevator speech ready for every major capability you possess.
- When delivering written communication or presentation of results, be concise and use bulleted notes when possible.
- Use business language as opposed to statistical or psychological terminology. Describe that your job is to help them collect, analyze, and interpret organizational data.
- Avoid jargon whenever possible. When not possible, define industry-typical terms.
 - Use graphics, pictures, and easily understood charts to demonstrate the impact of your findings.

Maintain SME

- Do not approach situations with a textbook solution. Be creative in your applications of I-O research methods.
- Remember that you are an expert (or an expert in training) and have very specialized technical knowledge. When someone asks you a question, it is typically because they don't know or understand.
- Respect your audience's expertise, experience, and ability. Be very careful to blend your experience with theirs and try not to be perceived as coming in with all of the answers.
- Trust yourself and have high levels of confidence in your recommendations.

Although not every I-O professional mentioned every subtheme, the interviewees were remarkably consistent in providing practical advice that aligned with our two primary themes: Preparing for Your Translation Experience and Translating I-O Psychology in the Field. There was one exception, however. Conflicting responses were provided regarding the use of the term "industrial-organizational psychology" in the field. Two respondents described specifically and purposefully beginning translation experiences by saying the full title to build awareness for our field.

Begin with "I am an industrial-organizational psychologist." Say the full 10-syllable job title, if for no other reason than branding purposes.

I always use the full term "industrial-organizational psychology" and then define it. I used to not even say it because of the confusion and blank stares. But, I now believe it's worth it not only to define myself accurately but also to spread the word about who we are and what we do to people outside of our field.

Conversely, a few other respondents specifically advised us *not* to use the full term when communicating I-O to an unfamiliar audience. Here is their rationale:

In my organization, we are part of HR so I usually don't mention I-O psychology by name but rather describe the functions we perform for my agency. For example, I describe that we are the technical wing in HR and that we focus on providing and improving tools or processes to attract, select, retain, evaluate, and motivate employees. With friends or family, I describe it as nerdy HR (I know that's not great, but it's the truth...) and then also try to focus more on functions I perform and the offerings we have for clients.

There are some good reasons, at least for me personally, to not use it. "I-O" doesn't have any meaning, at least by itself. Is that input/output? And if you say "well, that means industrial-organizational psychology" I think that for a lot of people, by the time you've gotten through "industrial-organizational" they've lost interest. So I call myself an organizational psychologist. Some people describe themselves as a work psychologist. I like organizational psychologist, because ... It's an easier term to get out.

This divergence is notable because most of the other advice we received was consistent across respondents. So, *TIP* readership and SIOP community members, we are curious. Do you describe yourself as an industrial-organizational psychologist, or do you use other terminology?

INTERACTIVE SURVEY

http://www.easypolls.net/ext/scripts/emPoll.js?p=57b5cf34e4b0d5df152663b2 hology, Inc.

In this article we consolidated best-practice recommendations from I-Os working in the field. In our next article, *Overcoming Critics of Social Science Research Methods*, we will relay more practical advice obtained from I-O professionals. We would like to thank all our interviewees and survey respondents for taking the time to give us their tips and advice. A special thank you to the participants who provided written and video responses for our column (some of whom requested to remain anonymous). Last, but certainly not least, we would like to thank the *TIP* readership for your support!

Reference

Hill, C. E., Knox, S., Thompson, B. J., Williams, E. N., Hess, S. A., & Ladany, N. (2005). Consensual qualitative research: An update. *Journal of Counseling Psychology*, *52*(2), 196.

GOHWP: Who We Are, Where We've Been, Where We're Headed

Ashley Hoffman North Carolina State

Laura Sywulak JetBlue

From its inception, the idea of humanitarian work psychology seemed to be fairly compelling to a great deal of I-O psychologists. Whether it was the idea of professionally contributing to a global issue, or bringing a new level of meaning to work, or even a calling that demanded fulfillment, the number of people captivated by the intersection of I-O psychology and the greater good was significant. In fact, when the Global Organisation for Humanitarian Work Psychology put out the call for founding members, nearly 90 like-minded individuals from around the world joined immediately. From there, GOHWP has continued to attract members from across the globe, working in multiple disciplines, with varied professional interests. It is our hope that with this column, we can update our readers about the current state of GOHWP membership, some of the interesting projects our members have shared with us, an update on our membership benefits survey progress, and a roadmap of where we are going from here.

Before doing so, however, I'd like to share two pieces of news. First, my coauthor on this column is my fellow GOHWP board member, **Laura Sywulak**. Laura and I have been on the board together for the last 2 years, and she has been a valuable contributor to all aspects of the organization. She has chipped in to work on a communications strategy, ran the blog and social media aspects of GOHWP, and has readily stepped in when there have been gaps that needed filling in projects of any nature. She is a tireless champion of the mission of GOHWP, and I'm personally encouraged and inspired by her leadership on the board and in the field.

Additionally, as my second term as the chair of GOHWP draws to a close, I will also be stepping down from authorship of this column. Tara Behrend and I have agreed this column will continue being published semiannually in TIP as part of the responsibilities of the current chair of GOHWP, the new chair of which will begin his or her term November 1, 2016. In addition, the incoming column editor will be working with the SIOP UN team column editor in order to avoid duplication of effort and to continue to provide the most recent happenings in the HWP realm. Thank you for being exceptionally attentive and kind readers during my (Ashley's) tenure, and thank you also to **Stu Carr, Lori Foster,** and **Alex Gloss** for preparing the way in this column, as well as **Morrie Mullins** for his ceaseless support of HWP. Now, on to the nitty gritty details!

The current GOHWP membership has grown from the aforementioned 90 members to 500 members strong as of August 2016. Our membership comes from a variety of applied backgrounds, as well as academic settings, including professors and instructors, I-O psychologists working in corporations, consultants with their own practices, and people working in government and military settings. We have a strong student population, with 19% of our members enrolled as undergraduate students with an interest in pursuing HWP work long term. We have a

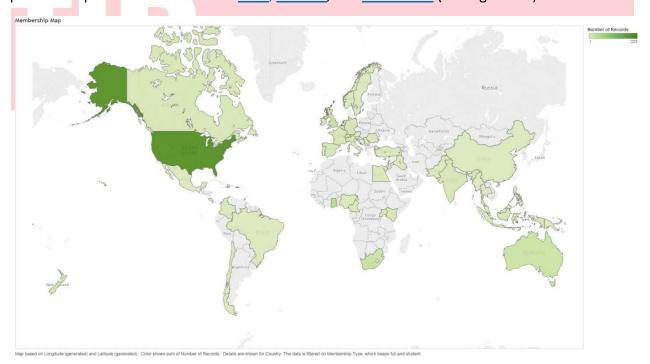
particularly strong presence at University of Ghana, where we have 42 undergraduate student members, many of whom actively serve on our student volunteer committee.

Our membership consists of 406 full members, either professionals or graduate students, and 94 undergraduate members; 306 members identify as female, 189 as male, and 2 people with nonbinary gender identities.

We are represented in 53 countries and have recently made our way into South America with new members in Chile, Colombia, and Brazil. We are excited to continue to expand throughout

Country	No. members	% members
USA	223	45%
Ghana	47	9%
United Kingdom	22	4%
Australia	21	4%
South Africa	21	4%
New Zealand	15	3%
All other countries	128	26.0%

Europe and to reach even more like-minded people throughout the world. Additionally, we are proud to represent members from <u>IAAP</u>, <u>EAWOP</u>, and <u>Division 52</u> (among others) of APA.



In addition to our membership growth, we have continued to make progress as an executive board. We sent a membership benefits survey to our members in 2013, asking them to indicate the types of initiatives and benefits they would like to see the board pursue. The main priorities were:

1. Clarity around GOHWP/HWP

- 2. Information sharing
- 3. Networking
- 4. Member recruitment

As a board, we have continued to keep these four priorities in mind when creating organizational strategy, setting our annual goals, and making decisions about which projects to pursue. As such, we would like to highlight some of the ways we have sought to address the requests and needs of our membership.

1. Clarity Around GOHWP/HWP

Clarity has been an ongoing issue within HWP as well as GOHWP. As mentioned in previous editions of this column, people often ask if what they do "counts" as humanitarian. In fact, the conversations continue, even internally, when members feel like their work is humanitarian in nature, but they don't quite "fit" with what everyone else is doing or researching. This goal continues to be important for the board as we seek to be inclusive rather than exclusive in our membership. We have always said it is our hope that HWP tenets become so entrenched into what it means to be an I-O psychologist that GOHWP doesn't have to exist as a separate entity any longer. To that end, we want to see decent work practices, humane environments, and corporate social responsibility to be mainstream initiatives in all work contexts. Whether you are studying volunteers who work in developing countries, running the CSR program in your organization, or leveraging your position to influence the company's policy decisions, you are doing HWP. When you are a person-centric, prosocially oriented employee, you can call yourself a supporter of the pillars of HWP. To that end, many GOHWP members participated in the Corporate Social Responsibility (CSR) Summit at SIOP in April, which is perhaps the most salient link between GOHWP initiatives and more traditional I-O psychology. The summit provided an excellent opportunity for GOHWP members and nonmembers alike to learn about the ways that I-O psychology is involved in pro-social research and applied work, and continued to further the mission of GOHWP.

Our mission is to understand and support efforts that enhance human welfare. To that end, we are committed to a continued focus on educating the public about HWP and connecting people who are engaged in this work. From blog posts highlighting current news and topics to partnerships with like-minded organizations, GOHWP strives to educate individuals about this space and strengthen the network of HWPs around the world.

2. Information Sharing

There are two distinct tracts that exist within information sharing as we see it on the GOHWP executive board. The first is sharing of information from the organization to members using a strong communication strategy. We have been working to identify factors that impact communication, including the improvement and standardization of our branding, creating a cadence of communication so members know when to expect communication from the organization, and

exploring more unique forms of communication, such as a town hall meeting, social media outlets, and video messaging. These are ongoing goals, and we hope to have many of them addressed during the current term.

The second tract of information sharing is between members. This information could be anything from submission notifications, publication opportunities, research collaborations, and a many other resources. We have continued to explore the best ways to meet the needs of our members, most recently by creating a membership profile system on our webpage. This profile system allows members to search for other members in the organization by location, interests, and/or openness to collaboration. It is our hope that members will leverage the profiles in order to connect with each other and share information. In addition, we hope to reinstate our member discussion list, where anyone can send an email to all members (who have opted into the feature) to share information and opportunities with each other.

3. Networking

We also have treated networking as two separate ventures, one that includes networking with like-minded organizations and another that addresses networking between members. We have been working diligently this term to identify and align ourselves with other like-minded organizations. For example, we have had meetings with high-level executives at a variety of nonprofit and volunteer organizations as well as department chairs and deans at universities around the globe. These networking opportunities have allowed us to connect with organizations that will promote the mission of GOHWP and provide us with access to membership opportunities, such as pro bono consulting work or research proposals, as well as potential long-term relationships and volunteer or employment opportunities.

To improve networking opportunities between members, we again are hopeful that members will take advantage of our internal profile system. However, we also support other opportunities for networking, such as our Facebook group (Global Organisation for Humanitarian Work Psychology), Twitter (@gohwp) page, and LinkedIn group (Global Organisation for Humanitarian Work Psychology). We try to publish posts on these sites in order to maintain a noticeable presence, and also use these tools to highlight some of the opportunities that arise between newsletters or email blasts. We also hope that members will use these sites to publicize information, and connect with other individual members for networking purposes. Finally, we have worked hard to have a presence at conferences and continue to hold our annual meeting at a large conference each year. This year we gathered at SIOP, where we held a networking happy hour in addition to our membership meeting. We also used badges to advertise our GOHWP membership and tried to have at least one GOHWP board member in attendance for all sessions related to HWP work, of which there were at least 16 posters and symposia, including the theme track sessions related to community engagement and improvement.

In the future, we are going to continue to improve our networking options and are hopeful that we will be able to create local interest groups, student-led groups, and other opportunities for connection.

4. Member Recruitment

As mentioned in our networking portion, we have made connections with many nonprofit organizations, as well as universities. These connections have led to small increases in membership. However, we have also had two major coordinated efforts to recruit new members. The first was a letter that was sent to members of the International Association of Applied Psychology, and the second was an invitation to all members of APA Division 52 (International Division). Both of these messages lead to an increase in membership, and many of the members who joined as a result of these initiatives continue to be highly engaged members in GOHWP.

In the future, we will continue to seek other outlets for outreach, including university recruitment, SIOP visibility, and nonprofit, NGO, and military exposure. We have a written script that we have used with great success in the past, and will seek to continue to refine our message and reach members who share our interest in HWP.

GOHWP was created largely to fill a perceived gap for I-O psychologists who didn't fit neatly into a traditional area within I-O. As we have continued to grow, we have noticed that the pool of interested individuals is much larger than we could have anticipated and continues to grow, not only in SIOP but around the world. We are working hard to lay a firm foundation in order to allow GOHWP to scale into a large membership organization, with the intention of eventually being absorbed as a mainstream part of I-O psychology and those membership organizations already in existence. We recognize that often this work is done quietly and behind the scenes, but we want you to know we continue to seek the improvement of the organization and continued benefit to our members and the world. We hope to send a new membership benefit survey in the coming months to continue to identify the areas that are important to our members and to refine our approach to serving those members. We are thankful for the support we continue to receive, not only from our members but also from SIOP, EAWOP, and IAAP, among other organizations. We look forward to ongoing progress, and hope that you will continue to support us as we grow!

Learning About Learning: The Organization of Corporate Training

Amy DuVernet and Tom Whelan Training Industry, Inc.

In our first column, we discussed how our traditional conceptions of what falls under the umbrella of "training" may represent a somewhat narrow view of the space, compared to the range of activities that fall under the purview of learning and development (L&D) functions. Similarly, conventional perspectives on how training departments are structured may also be incomplete. For example, traditional thinking often places training personnel in an organization's human resources (HR) department.

Why? Well, training logically fits in HR, as recruitment and selection are often a HR activity and intertwined with onboarding, training, and employee development. However, one size does not fit all when it comes to operational models of training, and there's no hard and fast rules about where training personnel "should" be found within a company's organizational chart. Accordingly, many companies opt for a separate training department or departments instead, which may or may not fly under the banner of the HR function. The actual arrangement and reporting structure of a training organization can have important implications for how training processes are enacted, as well as for the types and numbers of training personnel employed within the parent company. In this column, we will review the common structural models found in most contemporary organizations and talk about how the practice of I-O can forge effective intersections with our sometimes "long lost" L&D siblings.

Training Frameworks

Training organizations typically follow one of three common models: a centralized training organization/department, decentralized training departments or groups, or a federated model (Training Industry, n.d.; Tota, 2015; Todd, 2009). Below we provide brief definitions of each of these frameworks, offering information on the types of organizations that are likely to use each model and how I-Os can contribute within these frameworks.

Centralized Training

A centralized training organization groups all training personnel into a single, unified department. The reporting structure is fairly simple—one main executive assumes responsibility for the entire training team and all resources related to training are managed through this department (Training Industry, n.d.). A centralized training department can be a subset of employees within a larger HR team but may also function as a stand-alone department within the company. This type of training organization is typically most effective in smaller companies with a low degree of geographic dispersion. In this type of organization, an I-O could interact with the training department as both an internal and external consultant but is more likely to provide services as an external consultant given the company's (usually) smaller size. Here, interaction is likely to be fairly straightforward as decision making is facilitated by the direct reporting structure and most or all stakeholders are likely to be onsite. Todd's (2009) report suggests that approximately 40% of companies employ this model. The prevalence of this model may reside in its intuitive appeal, operational efficiency, and the propensity of an L&D organization to begin with a centralized structure when a company is in its beginning stages.

Decentralized Training

In contrast to the centralized training model, Todd's (2009) report estimated that between 10-40% of organizations use a decentralized training model. In a decentralized training model, training personnel are distributed across business functions (e.g., sales, R&D) and provide support specific to the business unit they serve (Training Industry, n.d.). These models are more typically found in larger companies with greater levels of geographical dispersion, as well as those that represent an amalgam of company acquisitions. In such arrangements, a centralized model could be too generic or inefficient, as the objectives of training need to cover a wider

learner audience that exists across multiple work sites. Further, acquired companies will often come with independent training functions that continue to operate in tandem with the parent organization after the companies have merged (Todd, 2009). This model lends an advantage over a centralized model in the form of heightened awareness and responsiveness for each business's needs. On the other hand, decentralized training functions present the potential for inconsistent approaches to training, inefficiencies, and duplicate L&D efforts across the enterprise (Training Industry, n.d.). They can also result in inequalities when business units that are directly tied to revenue streams (e.g., sales) have larger budgets than those that are not (Todd, 2009). Under this model, I-Os again may interact and add value as either internal or external consultants. Internal consultants in these organization may work from a centralized perspective, gathering input from a variety of training personnel. As such, I-Os can contribute by providing a high-level view to facilitate an understanding of where duplicated efforts occur across training groups and offer unifying strategy and communication channels. External I-O consultants may end up playing a similar role if multiple training departments within the organization look to them for services and should certainly consider all of the training departments when gathering data around their services.

Federated Training

Between 20-40% of organizations employ a federated training model (Todd, 2009), which represents a hybrid of centralized and decentralized models. In this model a centralized training organization is responsible for coordinating amongst decentralized personnel who are distributed across business units. For example, a training organization may place the resources and responsibility for training technologies, administration, and leadership development in a centralized department, but allow various business units to manage the content development, delivery, and evaluation of training programs that will meet their specific needs. Figure 1 depicts one configuration of this type of model.

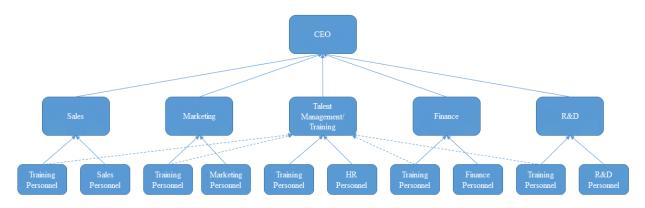


Figure 1: A Configuration of Federated Training Model

Training initiatives and programs that are common across the enterprise are more likely to be centralized in a federated model. For example, leadership development and onboarding are often centralized in this model. The federated model offers an advantage of minimizing inefficiencies while capitalizing on the decentralized model's ability to quickly address individual business

unit needs (Training Industry, n.d.). This model is often utilized as a strategic solution when decentralized organizations are tasked with reducing training budgets. For example, the pharmaceutical manufacturer Merck recently moved from a decentralized to a federated model in response to budgetary cuts (Ervin & Milberg, 2016). Under a federated model, internal I-Os are likely to be found in or interact with the centralized training organization or corporate university; here again, I-Os can provide insight and assistance in creating efficiencies across the distributed functions. External I-Os are also likely to interact most frequently with a centralized training organization but may work directly with or find a need to gather information from one or more decentralized groups.

I-Os in L&D

To elucidate further on the role that I-O can play within each model, we interviewed four I-O psychologists working both within and external to organizations in support of their L&D departments.

Jennifer Lindberg McGinnis, Organizational Effectiveness manager in the Talent Management division of the North Carolina Office of State Human Resources (OSHR), describes an arrangement similar to the federated model: "OSHR serves as the Center for HR Expertise and provides guidance, administration, and oversight of HR functional areas and programs. So, in short, in OSHR, our L&D team is primarily housed within the Talent Management Division. In the agencies, L&D may be one of many responsibilities generalists in HR departments have, or in some instances, these are specialized roles (learning administrator, instructional designer) housed within agency HR departments."

Red Hat also utilizes the federated model, according to Sarah Bienkowski, learning analyst with Red Hat University. "Our L&D personnel are centralized in Red Hat University, whose target learner population is Red Hat associates," she says. "However, there are additional L&D personnel spread across the organization. For example, we have SMEs in sales and technical groups that provide product and other training to Red Hat associates. Additionally, we have an external-facing training organization that provides Red Hat certification training for our customers (and our associates). Red Hat University has L&D consultants who work with these training partners to ensure that training is aligned with business needs and provides support, when needed."

External I-Os are likely to encounter many training organization models. For example, **Casey Mulqueen**, senior director of Learning and Development at the TRACOM Group, reports interacting with L&D professionals across various organizational structures. "With our largest clients, the people we work with are usually housed in the L&D department," Casey explains. "These are large departments that service regional or global areas within their organizations... they are responsible for the training programs within large areas and often across multiple departments. With smaller clients, we typically work with a mix of people within L&D, HR, and sales, depending on their specific needs. For example, a person may be in charge of the sales department of

their organization and work with us specifically on training their salespeople to develop better relationships with customers."

External I-Os working with public organizations in areas such as government and military are also likely to encounter a mixture of training structures. **Reanna Harman**, vice president and director of Consulting Practice at ALPS Solutions, stated that, "I work with training personnel and key stakeholders at all levels and often work on projects that involve coordination across groups within the same organization as well as projects which involve coordination across different organizations (e.g., coordinating with program directors from different groups)."

As we can see, training functions "in the wild" do not always neatly conform to a single, predictable framework. Engaging with these types of clients may require a fair bit of sleuthing to ensure that not only is one talking to the right people when it comes to decision making but that one is actually aware of who the right people are and under what department they sit in the first place. In short, understanding a company's training organization model can help in understanding the role that I-Os can play within those companies' L&D initiatives, in addition to the avenues we should pursue in providing value.

Forging Collaborative Relationships

Just as we must understand better the structural context in which L&D professionals approach their work, we must also strive to educate those who aren't familiar with I-O of the unique skillset we have to offer. Most of the I-Os we interviewed indicated that the training personnel with which they interact are not typically familiar with and do not have a background in I-O. It should be noted, however, that the degree of exposure to I-O across training personnel does vary. For example, Sarah Bienkowski said that, "training personnel in our organization (Red Hat University) are generally more familiar with I-O psychology than our L&D business partners who are in the sales and technical domains." This is crucial for I-Os to understand and bear in mind when interacting with L&D departments—the network of training personnel within an organization will often have varying levels of exposure to the scientific basis of what I-O represents. To some, our field is a tangled mouthful of syllables that they've never heard before; to others, we're well-respected experts. Obviously, much of the time the reality lies somewhere on the continuum between those two points, but it's up to us to move the needle in the right direction. The takeaway is that it becomes incumbent on I-Os to educate training personnel, particularly those in governance roles, on how our expertise can inform decision making when it comes to matters of L&D.

Rather than being deterred by this unfamiliarity of training personnel with I-O, Dr. Harman views it as an opportunity. "We have been the first I-Os that many of our clients have met," she says, "and we have had the opportunity to introduce them to the philosophical and methodological underpinnings of I-O which resonates with data-based decision makers." Don't be misled, however, into thinking this isn't a two-way street. As I-Os, we stand to learn a lot about what training personnel work on, which can have its own associated jargon and lingo that

sounds alien to us. Accordingly, Dr. Mulqueen asserts that the "impetus is on I-Os to learn instructional design and to become fluent in the business issues that are important for clients. I need to be an expert in my own field but I also need to recognize how our training programs can make our clients more successful, and be able to speak competently on those issues." This point cannot be emphasized enough: Just as I-Os strive to educate stakeholders about what it is that our background can offer, we have to be willing to learn and understand what they're already doing, but more often than not we're going to receive that information in their language, not ours. If we can't understand the talk—much less "talk the talk" ourselves—we'll have a significantly harder time translating our expertise into L&D terminology and making our intended positive impacts come to fruition.

In learning about the perspectives that L&D professionals hold, we have the opportunity to build lasting relationships and expose company stakeholders to aspects of I-O expertise that they may not have known about. Again, Dr. Harman highlights this opportunity, saying, "it's great to work with I-Os on the client side and take a collaborative approach to the project. On the other hand, when my clients are not I-Os, I have the opportunity to share something new and educate my clients on the I-O perspective and approach." It's clear there's a lot that we can bring to the table and take away as well.

In our next column, we'll continue our conversation with I-Os working with L&D departments to discuss the common educational backgrounds and roles of training personnel with whom they frequently rub shoulders, in addition to the benefits and challenges encountered when interacting with such personnel.

A publication of the Society for Ineferences and Organizational Psychology, Inc.

- Ervin, E. & Milberg, H. (2016, May). *Decentralized to right sized; A new global learning model at Merck*. Presented at the 2016 Training Industry Conference and Expo, Raleigh, NC.
- Todd, S. (2009). Designing the optimal organization structure and governance model. Corporate University Xchange, Spring, 1-17.
- Tota, J. (2015, October). 4 keys to optimizing learning organization structure. Retrieved from https://www.caveolearning.com/blog/4-keys-to-optimizing-learning-organization-structure.
- Training Industry. (n.d). *Organizational models in training*. Retrieved from http://www.train-ingindustry.com/wiki/entries/organizational-models-in-training.aspx
- Tyler, J. (2014, April 25). *Learning and development job titles 2014*. LinkedIn post. Available at https://www.linkedin.com/pulse/20140425173644-171314423-learning-and-development-job-titles-2014

On the Legal Front: EEOC Embraces the O-Side

Rich Tonowski U.S. Equal Employment Opportunity Commission

Traditionally the Legal Front has had an "industrial" (I-side) focus: selection practices, statistics, and how these play out in civil rights litigation. But here is something for our "organizational" (O-side) colleagues: the transformation of organizations. The federal government is promoting the interest.

The U.S. Equal Employment Opportunity Commission (EEOC) published two documents of note this summer. The first (EEOC, 2016) summarizes where its systemic discrimination program stands after ten years since its inception. The second, on preventing harassment (Feldblum & Lipnic, 2016), hints at where it may be going.

Systemic discrimination is associated with "more bang for the buck"—and more bucks—litigation strategy. Recruitment and hiring compose the prime systemic hunting ground (Cueni-Cohen, 2016). For example, a company-wide selection procedure is likely to affect multiple applicants; attacking such a procedure if it is discriminatory would provide relief to many present and future applicants, and that relief would likely have substantial monetary value. These circumstances lend themselves to class actions, where the plaintiff sues on behalf of all those similarly situated regarding the alleged discrimination. The metric of success on EEOC's website is dollars; that includes money for those injured by the discrimination and also the cost of implementing a new valid and nondiscriminatory procedure. Other metrics apparently include the number of employees benefitted and the extent of proactive structural change discussed below (Maatman, Janice, & Karasik, 2016). Regarding the latter, the report cites to a more nuanced view of systemic discrimination: "bias built into systems, originating in the way work is organized" and "refers to structures that shape the work environment or employment prospects differently for different types of workers" (Kim, 2015). Through footnotes and citations, Kim elaborates on this to observe that earlier discrimination cases involved discrete management actions, although now the issue is workplace interactions at all levels.

The report details the resources that the agency has put into fighting systemic discrimination and some notable outcomes. Multimillion dollar settlements and judgments are likely to get attention and influence some employment structures. But these do not necessarily break new ground regarding those structures. The following highlights areas in which EEOC might claim credit in changing how America does business.

Selection Methods

Despite having three suits tossed and only two publicized major settlements, EEOC's litigation and guidance has contributed to a change in the use of credit and criminal history for employment selection. The report indicated only two situations involving formal selection procedures, both ending in pretrial settlement. Other hiring situations involved employers allegedly refused to hire women for "traditionally male" jobs (e.g., truck driving, warehouse operations);

these apparently did not involve formal selection methods. Resolution for some of these specifically mention development of better selection procedures, and monitoring for as long as 5 years.

Disability Accommodations

An organization may have to place a person with a disability in a vacant position without requiring the person to compete for that position unless that causes the employer unreasonable hardship (*EEOC v. United Airlines*, 2012). There were also cases where maximum leave policies may be unlawful if they preclude further leave as a reasonable accommodation.

LGBT Rights

This is definitely a priority area, where the agency is building on precedent regarding gender stereotyping to challenge discrimination on sexual orientation and gender identity. There have been some settlements; but a federal Court of Appeals recently ruled (*Hivley*, 2016) that sexual orientation is not protected by Title VII. The agency lost on summary judgment in a case that pitted transgender rights against religious rights (*EEOC v. R.G. & G.R. Harris Funeral Homes, Inc.*, 2016). The court found that transgender status was not a protected class, but gender stereotype sex discrimination theory did apply. However, the defendant had a legitimate defense under the Religious Freedom Restoration Act; EEOC should have tried for a "least restrictive" resolution before suing. A district court entered the dispute over appropriate rest rooms for transgender people in educational institutions with a nationwide injunction against the federal government (*Texas* v. *U.S.*, 2016). The opinion criticized several federal agencies, including the EEOC, for equating gender identity discrimination with sex discrimination despite no support in law and contrary to indications in previous policy. The court's action speaks to a failure to engage in proper rulemaking, not more substantive issues. However, the court covered not only Title IX issues regarding education but also Title VII regarding employment.

Conspicuous by its absence was mention of any major successful pay discrimination suit, although there were settlements, some well into multimillions of dollars. Pay equity has been a priority for the Obama Administration. Mentioned but with little success so far was the effort to strike what has been described by employer-side commentators as standard language in severance agreements regarding further legal activity by the departing employee. On the agenda is fighting employer mandatory arbitration policies for EEO complaints. Federal law, as interpreted by the U.S. Supreme Court, favors arbitration in consumer disputes. This has spurred adoption of employment arbitration policies, particularly those that specify that complaints must only be individual and not class action. See Silver-Greenberg and Gebeloff (2015) for arbitration practices that have outraged consumer and civil rights advocates; there is, of course, advocacy in favor of arbitration.

The agency came out ahead in some fights about its authority that, although not producing substantive change in applicability of EEO law, confirmed its ability to bring big and potentially costly suits. Specifically, courts can only perform a minimal review of presuit conciliation adequacy (*Mach Mining*, 2015). In an appellate decision, the agency can seek compensatory and punitive damages when it files a class action suit for disparate treatment.

Employer-side advocates, as might be expected, have a less enthusiastic view of the agency's aggressive stance. But there has also been a body of criticism that the systemic program does not do enough to promote more inclusive workplaces. EEOC's report does address some of what it has sought to do in that regard under the title of "targeted injunctive relief." These are practices in the award or settlement regarding practices that the employer will follow in the future.

Criticism of litigation as a blunt instrument to effect inclusion is not new. Selmi (2003) argued that class actions had become the mechanism of monetary transfer, not of workplace reform. Although the conclusions risks overgeneralization, research indicates general effectiveness for goal setting and accountability in increasing demographic representation in workforces. Dobbin and Kalev (2007) concluded that EEOC and Office of Federal Contract Compliance enforcement had positive effects on integrating corporate management. But more recently, Kuang and Archer (2014) noted that, for all the litigation effort 1998–2012, by the end of that period increased participation rates by women and minority groups in the officials and managers group for EEO-1 reporting has been uneven, with some slippage for African Americans. This had also been noted by Dobbin and Kalev (2016). Getting people into the workforce does not address what happens once they are there, an issue particularly salient with workplace harassment. Organizations may be achieving demographic representation without inclusion.

Litigation without follow up is unlikely to promote inclusion. The root of the problem is that litigation is an adversarial process, whereas organizational change needs to be cooperative. A "gladiatorial" contest (Schlanger & Kim, 2014) is marked by winners and losers, and the fighting can continue beyond the court's decision. Where the employer thinks that the outcome was not fair, or there was a settlement accepted only to avoid hemorrhaging money in protracted litigation, cooperation may not be forthcoming. Terms are imposed on the employer, generally with monitoring provisions for a fixed time period, enforceable by the court. One analogy for this situation relates to the American Civil War and its Reconstruction aftermath; there are the fierce battles followed by an imposed peace, sullen compliance by the defeated regarding civil rights protection, and backsliding once the enforcement pressure is off (Dickson et al., 2016).

In contrast, the "collaboration" model featured cooperation with management and an "experimentalist" approach to solving problems of unequal treatment rather than a rigid follow-up to the litigation, possible with court supervision to ensure that the terms of settlement are fulfilled as specified. Such a model requires mutual trust and commitment, and expertise to develop possible solutions and to refine them as necessary; it likely will require the investment of resources and time. "Collaboration," of course, has both positive and negative connotations: cooperation for the common cause and selling out the cause.

At issue is not only whether there is follow up but whether it is effective. One complication is confusion regarding a human resources management (HRM) infrastructure and structural reform to end discrimination. The critique of the "managerialist" (Schlanger & Kim, 2014) response to discrimination is that it implements management practices widely accepted regardless of civil rights impact. Although these authors acknowledge the necessity of HRM, they criticize EEOC's injunctive practices in systemic cases as "pursuing standard, bureaucratic personnel practices." Insofar as the critique has been applied broadly to HR management practices by oth-

ers, possibly because there is no distinction between effective and ineffective managerial practices, it misses an essential point that practices such as sound personnel selection procedures exist first to maintain the organization. But besides the problem with ineffective practices as bad management, Edelman and her colleagues (Edelman, Krieger, Eliason, Albiston, & Mellema, 2011) have noted, to their dismay, that courts are influenced by the mere presence of programs intended to alleviate workplace discrimination, regardless of their effectiveness.

There is a longstanding discontent with "diversity" programs as resolving workplace inequity. The matter was discussed by Kalev, Dobbin, and Kelly (2006; see Vedantam [2008] for a summary); a decade later, there is more of the same (Dobbin and Kalev, 2016). Kim, Kalev, and Dobbin (2012) faulted formalized hiring procedures, diversity training, grievance procedures because they treat managers as the source of the problem, rather than involving managers in solutions to increase diversity. The critique of the managerialist position offers an explanation for this. Adoption of something that is in line with what the organization does routinely (e.g., classroom training) can be quickly implemented and signals the organization's intent to do something about discrimination. Insofar as the point of "doing something" is defined primarily as reducing legal liability, it may work. More generally, the managerialist approach treats discrimination as a typical managerial problem with typical policy-and-procedure solutions. The alternative is a sustained postlitigation effort to get at the causes of the discriminatory behavior, perhaps with cost that appeals to neither side. (See King and Gilrane [2015] for a discussion of evidence-based recommendations for leveraging diversity as an organizational opportunity.)

Feldblum and Lipnic (2016) joined the criticism with respect to sexual harassment: training focused simply on avoiding legal liability but a third of EEOC's charges involve allegations of workplace harassment; much more goes unreported by victims; and employers suffer decreased productivity, increased turnover, and reputational harm—and \$164.5M in monetary recovery for 2015 secured by EEOC. The report's criticism of training and highlighting of a dozen risk factors seems to have caught commentators' attention; see Burden (2016) for one synopsis. But the detailed recommendations offer more:

- Settlements and conciliations to include agreement that researchers will be allowed to work with the employer in assessing effectiveness of policies and practices to prevent harassment.
- Groups of employers encouraged to offer access to researchers to assess the effectiveness of antiharassment training.
- More compliance training for employers from EEOC.
- Adoption of civility and bystander intervention training. The report indicates that civility training has appeared in the workplace to counteract bullying and has been used by some Federal agencies. Bystander intervention training has been more of an antiharassment intervention on college campuses.
- Recognition of culture and climate as influencing individual behavior.

These recommendations are not a detailed proposal nor do they include a comprehensive review of the research literature. Perhaps more technical detail will be forthcoming from the task force. A concerted professional approach that might be taken by the "researchers" might discuss additional concepts and approaches. Related issues might include employee engagement and barriers to securing it, as well as dealing with microinequities and microaggressions. These terms refer to practices, with or without malicious intent, that do not rise to the level of

legally cognizable harassment but have a deleterious effect on their targets and, ultimately, on the organization.

There is a touch of realism. Workplace civility training has not been evaluated as a harassment prevention tool per se. The recommendations depend on training, albeit different from the type being criticized. The authors quote the U.S. Supreme Court to the effect that Title VII is not a code of civility. They also take on potential conflict with the National Labor Relations Board (NLRB). In recent decisions the NLRB has found that it is an unfair labor practice for "civility codes" to suppress concerted activity on the part of the employees. Nasty words about supervisors and management in general might be protected.

Also, it would be a mistake to conclude that EEOC has not been concerned with postlitigation efforts to prevent discrimination. Schlanger and Kim (2014), while criticizing the agency for not doing enough, provide case studies illustrating how the agency has collaborated with employers in postlitigation organizational development. The systemic program report indicated that 81.2% of pre- and post-litigation resolutions included targeted equitable relief. Further details on the relief were not discussed; some of the footnotes provide information on specific lawsuits.

Still, this appears to be the first time that the agency has called out practices presumably intended to further EEO as ineffective. The obvious question is what happens next, and an answer has not been publicized. The executive summary in the systemic program report (EEOC, 2006) said "the agency is also studying the promising forms of remedial relief for inclusion in its resolutions to ensure they will have a tangible impact in reducing future violations."

In June 2016 the agency held a conference for its systemic people that featured social science folks talking about, among other things, inclusion. There were several mentions that this work involves I-O psychology; interestingly, none of the presenters seems to have primary professional identification in I-O.

There are caveats for the agency regarding jumping into the O-side. Lack of resources is an obvious one. As part of the systemic effort, the agency has staffed up with social science people. But they already keep busy with helping investigations, litigation, and special efforts such as the proposed pay collection addition to EEO-1 reports. Being able to monitor a sustained effort without becoming embroiled with the employer's management of the business is another concern. Traditional agreements specify what is to be done and when it has to be done by; this is usually soon after the case is decided or settled. But a collaborationist approach is exploratory and long lasting; 5 years has been given as a reasonable minimum time frame (Dickson et al., 2016). The caseload for EEOC also limits what systemic opportunities present themselves; most of the caseload is terminations, and generally not with a systemic underlying policy.

Implications for I-O

There are a number of attorneys well versed in the social sciences who comment on diversity and inclusion, but generally their field is not I-O psychology. Absent from much of the legal scholarship on diversity issues is the notion that employers have a nondiscriminatory interest in seeking the best qualified employees, and that qualifications sometimes do not align with protected class demographics. The "diversity-validity dilemma" is a familiar issue to I-O types, perhaps less so to legal scholars. Accordingly, it may be easy for some to dismiss management

practices as "bureaucratic," or "window dressing" that distracts from EEO problems. Our profession should be concerned about this. Lawyers have a tendency to try to make law.

There is an ongoing theme that organizational managers do not adopt effective workforce practices, where "effective" is demonstrable evidence of meeting the practice's intended purpose. This underlies the managerialist critique. Kalev and Dobbin's writings note in particular opposition to sound selection methods, a perennial issue; Nolan, Carter, and Dalal (2016) recently observed that managers fear becoming less valuable when technology offers a better outcome than their subjectivity. To the extent that it seems that organizations are doing just fine whether or not they have effective practices, imposition of enhanced EEO protection by law or regulation without regard to organizational effects starts looking viable.

Cumulative research on what works and does not for a given purpose also matters. This needs to be disseminated widely to practitioners.

SIOP has a task force that has been talking with EEOC about contemporary personnel selection issues. EEOC may have an interest in hearing from SIOP on dealing with workplace inclusion. If so, it is an opportunity not to be missed.

Discrimination exists, in various forms; but systemic *overt* discrimination seems less of a problem than previously. Pay equity and LGBT rights are current topics of discussion, not without controversy. But the discussion implies an interest in exploring what the problems and possible solutions might be. It is also a time of interest in employee engagement, performance management, and collaboration—and diversity and inclusion as well. If a federal EEO enforcement agency wants to encourage interventions that promote both EEO and organizational productivity, as well as research into evidence-based best practices, a collaborationist approach involving individual I-O psychologists a well as academic and consulting institutions should take up the invitation.

The time is ripe. of the Society for Industrial and Organizational Psychology, Inc.

References

- Burden, L. (2016, June 29). Report calls for reboot of anti-harassment initiatives. Society for Human Resource Management. Retrieved from https://www.shrm.org/resourcesandtools/legal-and-compliance/employment-law/pages/report-calls-for-reboot-of-anti-harassment-initiatives.aspx.
- Cueni-Cohen, J. (2016, August 2). Tackling systemic discrimination. *Human Resources Executive Online*. Retrieved from http://www.hreonline.com/HRE/view/story.jhtml?id=534360940
- Dickson, M. W., Goldstein, H., Klein, A., Lundquist, K., Oliver, L. & Yusko, K. (2016, April). Implementing deep organizational change in HR-focused consent decree situations. Panel discussion conducted at the 31st Annual Conference of the Society for Industrial and Organizational Psychology, Anaheim, CA.
- Dobbin, F. & Kalev, A. (2007) The architecture of inclusion: Evidence from corporate diversity programs. *Harvard Journal of Law and Gender*, *30*, 179-301.
- Dobbin, F. & Kalev, A. (2016, July-August). Why diversity programs fail. *Harvard Business Review*. Retrieved from https://hbr.org/2016/07/why-diversity-programs-fail.

- Edelman, L.B., Krieger, L.H., Eliason, S.R., Albiston, C.R., and Mellema, V. (2011). When organizations rule: Judisicial deference to institutionalized employment structures. *American Journal of Sociology*, 117, 888-954.
- EEOC (2016). Advancing opportunity: A review of the systemic program of the U.S. Equal Employment Opportunity Commission. Retrieved from https://www.eeoc.gov/eeoc/systemic/review/
- EEOC v. R.G. & G.R. Harris Funeral Homes, Inc., No. 14-13710 (E.D. Michigan August 18, 2016). EEOC v. United Airlines, 693 F.3d 760 (7th Cir. 2012).
- Feldblum, C. R & Lipnic, V. A. (2016). Report of the co-chairs of the EEOC Select Task Force on the Study of Harassment in the Workplace. Retrieved from https://www.eeoc.gov/eeoc/task_force/harassment/report.cfm
- Hivley v. Ivy Tech Community College, No. 15-1720 (7th Cir. July 28, 2016).
- Kalev, A., Dobbin, F., & Kelly E. (2006). Best practices or best guesses? Assessing the efficacy of corporate affirmative action and diversity policies. *American Sociological Review*, 71, 589-617.
- Kim, P. (2015). Addressing systemic discrimination: Public enforcement and the role of the EEOC. *Boston University Law Review*, *95*, 1133-1154.
- Kim, S., Kalev, A., & Dobbin, F. (2012). Progressive corporations at work: The case of diversity programs. *New York University Review of Law and Social Change*, *36*, 171-213.
- King, E. & Gilrane, V. (2015). Social science strategies for managing diversity: industrial and organizational opportunities to enhance inclusion. Society for Human Resource Management. Retrieved from https://www.shrm.org/hr-today/trends-and-forecasting/special-reports-and-expert-views/Documents/SHRM-SIOP%20Diversity.pdf
- Kuang, D. & Archer, M. (2014). How far we have come: Measuring the progress of women and minorities in official/manager and professional management positions at Title VII's 50th anniversary. *EEO Insight*, *6*, 11-17.
- Maatman, G.L., Janice, C.M., & Karasik, A.W. (2016, July 15). After a decade of mixed results, EEOC rebrands its systemic discrimination litigation program. Seyfarth-Shaw Workplace Class Action Blog. Retrieved from http://www.workplaceclassaction.com/2016/07/after-a-decade-of-mixed-results-eeoc-rebrands-its-systemic-discrimination-litigation-program/.
- Mach Mining v. EEOC, No. 13-1019 (U.S. April 29, 2015).
- Nolan, K.P., Carter, N.T., & Dalal, D.K. (2016) Threat of technological unemployment: Are hiring managers discounted for using standardized employee selection practices? *Personnel Assessment and Decisions*, 2, Article 4. Retrieved from http://scholarworks.bgsu.edu/pad/vol2/iss1/4
- Schlanger, M. & Kim, P. (2014). The Equal Employment Opportunity Commission and structural reform of the American workplace. *Washington University Law Review*, *91*, 1519-1590.
- Selmi, M. (2003). The price of discrimination: The nature of class action employment *discrimination* and its effects. *Texas Law Review*, *81*, 1249-1336.
- Silver-Greenberg, J. & Gebeloff, R. (2015, November 2). Arbitration everywhere, stacking the deck of justice. *The New York Times*. Retrieved from http://www.nytimes/2015/11/01/business.
- Texas v. United States, No. 7:16-cv-00054 (N.D. Texas preliminary injunction order August 21, 2016).

Vedantam, S. (2008, January 20). Most diversity training ineffective, study finds. *The Washington Post*. Retrieved from http://www.washingtonpost.com/wp-dyn/content/article/2008/01/19/ AR2008011901899.html

Max. Classroom Capacity

Loren J. Naidoo Baruch College and the Graduate Center, CUNY

Dear readers, for this issue I am pleased to invite Kenneth G. Brown, 2015 winner of the SIOP Distinguished Teaching Contributions Award, to share some of his thoughts on teaching. Ken is the Ralph L. Sheets Professor of Management and associate dean of the Tippie College of Business, University of Iowa. Ken is an award-winning scholar and teacher with longstanding interests in learning and motivation. He is a fellow of SIOP and APS and former editor-in-chief of *Academy of Management Learning and Education*, the premiere educational journal in the business disciplines. Ken was voted three times as the Student's Choice for Faculty Excellence in the Tippie College. He also won the highest teaching honor bestowed at the University of Iowa, the President and Provost Award for Teaching Excellence. I'm delighted to welcome Ken to Max. Classroom Capacity!

Teaching Through the Lens of Research on Training and Learning

Kenneth G. Brown



My training as an I-O psychologist established a foundation that has helped me time and time again as a teacher. Bolstered by my research in workplace training and learning, my understanding of people and processes has been an effective guide as I planned for and delivered a variety of courses, from a large undergraduate survey course to executive MBA courses to doctoral seminars. In this column, I provide a few examples of the way our discipline has helped me. I will conclude with a statement of gratitude and advice for graduate students and faculty who aspire to further improve their teaching.

Assessing Needs and Setting Objectives

A fundamental principle of effective training is that design should begin with clear learning objectives that are linked to desired real world performance. One method for establishing learning objectives is task analysis. When I first began teaching I struggled with the question of how to apply the logic of task analysis and learning objectives to my courses.

The syllabi that I borrowed from colleagues when I started teaching often had objectives that listed content to be covered rather than knowledge and skill to be gained. At times it seemed that these topic lists were driven by the textbook chapters rather than by a concern for what students need to know to succeed in the future. But students are not like new employees, at

least in some ways. Unlike entry-level employees who need to learn the same, objective processes, students in higher education (even those in the same major) are unlikely to hold the same jobs or hold jobs in that field for that matter. How could I align objectives with the future heterogeneous and uncertain world that students would face?

The answer to this question was simpler than I expected and followed from basic lessons about task analysis. Task analysis examines what trainees will do after training and acknowledges potential heterogeneity by focusing on commonalities. Specifically, common forms of task analysis determine the shared, frequently conducted, and important tasks that trainees face back on the job. In this regard, university students do share a common fate, including subsequent courses in the curriculum and an entry-level job (or graduate school seat) that will require fundamental competencies in critical thinking and communication. These commonalities led me to a few simple practices, including talking to the instructors who teach downstream courses and learning more about students' first jobs. For downstream courses, I have found it useful to review both formal curriculum (captured in syllabi and readings) and faculty's implicit assumptions about what students should know and be able to do coming into their course (captured through face-to-face conversation). I still remember the first time I interviewed an accounting professor about his thoughts on what my Introduction to Management course should know. He was astounded, albeit pleasantly so. The practice of consulting downstream faculty, or at least meeting in a curriculum meeting, is routine at some schools, but why isn't this standard practice everywhere? Perhaps some of us are so entrenched in our disciplines that we think our focus, our materials, are the best ones? My I-O training prodded me to recognize that a discipline matter (to be true to course titles at least), but they matter less than requisite knowledge and skill for desired performance. So I sought, and continue to do so when I teach new courses, information about the performance desired by faculty who teach further into the curriculum. I also have found it helpful to talk with recent graduates and employers about their expectations of our graduates. These conversations, and associated large-scale studies, have guided me toward particular types of classroom assignments. Based on the need for better critical thinking and communication skills, I focus activities in almost all of my courses on common written and verbal communications, including emails, letters, and short reports. In the case of doctoral students, I have them write journal reviews as well as research papers.

Building Authentic Practice to Boost Transfer

Doctoral students who go into academia will face a lifetime of writing and presenting reasonably technical material. But this mix of work activities is less likely for college graduates who head into corporate or nonprofit life. More common work assignments will be informative emails, short persuasive written reports, and brief presentations. Interacting with employers of students to discern this information has been helpful for designing practice opportunities that are similar to the work students will perform. In this way, I attempt to have students work on products that are similar to what they will do at work, increasing transfer of training.

Service learning, and its many associated practices, is another way that I attempt to encourage transfer and build authentic practice opportunities. Service learning has been defined as putting students into a position to apply their newly acquired knowledge to address social

problems. Many years ago I had the great fortune of attending a workshop by Edward Zlotkowski, the founder of the Bentley Service-Learning Center. Edward is an outstanding teacher and staunch advocate for creating authentic opportunities for students to apply knowledge learned in class through work with communities and nonprofit organizations. Since taking his workshop, I teach my training course in collaboration with local nonprofit organizations. Students are randomly assigned to teams and then rank order their preferred projects. Projects vary from creating board training for a local fundraising organization to creating training for food pantry volunteers. I strive to have the need be real although somewhat ambiguous. When it works, this type of project challenges students to conduct a thorough needs assessment to find and define as well as address the need in question. I have had many students express frustration during the class but then gratitude after because of all they have learned. This pattern of frustration and satisfaction (or relief at being done, in some cases) is a feature of trial-by-fire, stretch assignments. Although I provide ongoing support and guidance during the course, and many opportunities for feedback, the challenge of authentic work can be inspiring for students.

Assessing Person Characteristics and Designing Motivating Instruction

Another practice that I use, drawing on I-O research, is to examine the interests and motivations of students. At the beginning of every course I have students complete a student information survey. In the survey I ask about their reasons for taking the class, their past experiences relevant to the class, their future career goals, and the names of companies and organizations that interest them. I use a checklist format where possible and report back to students with histograms and simple charts (using another principle from my I-O training— don't ask for data unless you intend to use it and share the results in an accessible way). I then use this information to tailor the examples in class and at times even adjust one or two class days. Just as importantly, I use knowledge of student experiences to identify any discrepancies in my knowledge of their motivations and past experience. When a class has had an unusual number of students who are not familiar with certain features of our learning management system, for example, I added a 15-minute participative discussion of those features.

Allowing students input the course should boost motivation and allow them to see that I am interested in helping them have a meaningful learning experience. In some classes, where possible, I have taken this further with a "voted topic day," where I allowed students to vote among a number of possible topics related to the course. In a doctoral seminar, I have allowed students to vote, before the class began, for their favorite of 8 among 12 possible topics. The most recent time I taught a training doctoral seminar, I allowed students the opportunity to drop an assignment that they deemed least central to their intended future profession. They could choose to drop either a practice-oriented paper or a journal submission review. This option both gave students choice and sent a clear signal that as an instructor I am equally concerned with training practitioners as researchers.

Providing Repeated Practice and Feedback

When I first began teaching a large, required Introduction to Management class, I wanted students to have a hands-on opportunity to practice managing a team. I also wanted to provide an opportunity for students to learn how to work in teams to produce well-researched arguments. To accomplish both goals, I designed four cases to be completed by four-person

groups, each requiring that the group work together. I also assigned students to rotate through as the "team manager," providing both role description and some reward and punishment power to the person in this position (allowing him/her to recommend extra point or firing of team members).

Each project is a different case, but each requires the team to create a written document that is graded along the same rubric that demands well-researched and clear arguments. Without going into too much detail, I have adopted and adjusted this approach over the years with the help of many talented teaching assistants and now other faculty. The basic approach remains the same and students in the class are provided an opportunity to practice managing and to engage in repeated practice producing written arguments. Each time I finish teaching the class, I wish there was more we could do including providing students feedback from their peers on their management activities and an opportunity to practice again. But one class cannot teach everything, so we have those opportunities in smaller classes, deeper into our curriculum.

Conclusion

My training as an I-O psychologist, and in particular my understanding of needs assessment, practice opportunities, motivation, and feedback, have been so useful for me as a teacher. Of course, much of what I have written here is not new. I know many of these ideas have been written about in past Max. Classroom Capacity columns. What I hope is unique in this article is the framing that has helped me make sense of why I enjoy teaching so much and find myself with more ideas that I can possibly use. When I wear my I-O psychologist hat, I have most of the conceptual frameworks and methodological tools that I need to build and deliver excellent classes.

I am grateful to my undergraduate and graduate instructors for helping me become acquainted with the field. Since graduating, I have also been fortunate to observe many outstanding teachers at the University of Iowa, Tippie College of Business, including the late Jude West, Professor Emeritus Nancy Hauserman, and my colleague and life partner, Amy Kristof-Brown, among others. As part of my role as a senior faculty member, I observed junior faculty and doctoral students, and I am confident that I learned more from watching them than they did from my feedback. And I even had an opportunity to teach with faculty from English (Teresa Mangum) and from Education (Rachel Williams), and each time it was a fun, eye-opening experience to work with people trained in other disciplines. Just as enlightening has been collaborating with younger faculty and doctoral students, where I benefited immensely from discussion and debate. I have learned so much from my instructional teams and am so proud of the great work they have gone on to do both at Iowa and at other institutions.

The value of observation, experimentation, discussion, and reflection cannot be overstated as avenues for learning new approaches to teaching and refining them over time. I encourage all teachers who want to improve to do more of each of these activities: Observe others as they teach, experiment with new techniques and technologies, discuss teaching with students and colleagues, and spend time reading and reflecting on teaching as a practice. Much more has been written about each these topics because, after all, teaching is a form of work performance that is learned in a variety of ways. For me, training I-O psychology was an outstanding foundation for a lifetime of learning about teaching.

International Practice Forum Special Series Industrial-Organizational Psychology Helps Heal the World (Part 1): Using I-O to Help Refugees

Lynda Zugec and Walter Reichman with Kristie Campana





We have an exciting new development for the International Practice Forum! With Walter Reichman (OrgVitality) and a number of I-O psychology practitioners and academics, we will be exploring the ways in which "Industrial-Organizational Psychology Helps Heal the World." Through a series of articles, we will present real and actionable ways in which I-O academics and practitioners have an impact in innovative and creative ways

and how they have been helping to heal the world!

Using I-O to Help Refugees

By Kristie Campana Minnesota State University

As an instructor at Minnesota State University, I do my best to impact the world by helping my students to become competent, ethical consultants. One issue that I try to impress upon them is that as I-O psychologists, we have special skills that can benefit almost any individual, in almost any organization. It's easy to focus just on client projects, where often our job is to make organizations more profitable. We sometimes forget the human component of our work, and lately, I have been wanting to do more with my skills to improve the world around us.

One major motivator for increasing my volunteerism is some of the current rhetoric surrounding refugees and immigrants.¹ At Minnesota State, we have a decent number of refugees and first-generation college students. As the presidential election has progressed, I have been bothered by the way immigrants are discussed and treated by politicians and the media. The brave, intelligent, and thoughtful students that I have come to know through my job belie the negative stereotypes that proliferate about them.

Rather than complain about this issue, I decided to find ways to address the problem within my community. Minnesota is a popular secondary settlement site for refugees; many of them spend their first few years in another location (such as Atlanta or other major immigration hubs) and then subsequently choose to relocate to Minnesota because of our strong social programs and close-knit refugee communities. A simple Google search using the phrase "refugee volunteering opportunities" quickly brought up several possible organizations that were looking for help.

One of the first organizations listed in my Google search was the Minnesota Council of Churches (MCC), which has refugee services in Minneapolis and Mankato. I connected with Jessica O'Brien at MCC to see what opportunities would exist that could make use of my skills.

MCC's goal is to build common good in the world and their mission extends across many nationalities and religions. So, although they are based within a religious organization, they work with refugees of many different faiths (primarily Muslim), and do not have any requirements about volunteers' religious affiliations. This may not be the case for all volunteer organizations, so this may be an important question to ask as you look for similar groups in your area.

At this time, I have been involved with MCC for about 8 months and have had the opportunity to work on several projects. However, the project that has best leveraged my skills as an I-O psychologist has been serving on their MCC Refugee Employer Advisory Committee. The goal of this committee is to find community partners who would be willing to hire and mentor new immigrants as they transition into U.S. jobs. The creation of this committee was prompted by a recent program change within the state of Minnesota.

Previously, there was a supported work program (*Work-Try-Out*) that would pay up to the first month of employment to provide incentives to businesses to hire immigrant job seekers. Immigrants face many to employment due no GED or high school diploma in addition to a lack of work history in the U.S. Employers were eager to take advantage of this program, as it was essentially risk free for them to hire an immigrant worker, with the option to lay off this worker if the quality of work was poor. However, employers were pleased with their immigrant employees and now are much more willing to view this group as a potential and viable pool of employees.

Unfortunately, this program was terminated, and MCC has been faced with the problem of finding new ways to help employers consider refugees for positions. Although those who participated in the *Work-Try-Out* program continue to hire refugees, other organizations continue to be reluctant, often because of concerns about paperwork, concerns about language or cultural barriers, or simply because of xenophobia or racism. Our new task is to find ways to persuade these uninitiated groups to consider refugees for appropriate jobs.

MCC did an excellent job of finding other board members; my inclusion was really just a matter of good timing. We have had some initial meetings where very well-connected community members brainstormed together to discuss other problems our city was facing. One major problem among employers in our area is that there is a great need for cultural competency. Our workforce is becoming more diverse and global, and many managers continue to hold outdated notions of other cultures. This has led to a number of conflicts and problems within local workplaces where having a better understanding of diversity and its advantages would be helpful.

In conjunction with our Continuing Education director, we are currently advancing a program that will include a development center for new managers that will focus on many of the classic exercises and constructs in addition to a heavy focus on cultural competency. What better way for managers to build cultural competency than to support them in getting involved with a diverse international community that is a 5-minute drive from their workplace?

The details for this project are still quite tentative, but we are hoping to build on an existing program known as Tapestry, where refugees have a chance to interact with community members (such as police officers, teachers, and others) to talk about cultural differences and what it's like to live in a new country that is so different from their previous home. If classic studies from social psychology are to be believed, we are hoping that having some of these managers interact and cooperate with our refugee population will help to build their empathy for our refugee population and to also see how diversity can aid teamwork. Because our immigrant population in Mankato is primarily Somali and Mexican, our managers will hopefully get

an opportunity to learn about two cultures by meeting new people and having thoughtful discussions and activities with them. We are hoping that the learning will go both ways. Our refugees often have little experience writing resumés and interviewing; ideally, as these interactions progress, managers may find opportunities to mentor their refugee colleagues as they learn how to navigate the U.S. workforce.

Although the focus of this International Practice Forum Special Series is primarily to discuss how we, as I-O psychology practitioners and academics, can help improve the lives of others, I wanted to emphasize that this experience has really enriched my own life in ways I hadn't expected. It has helped me continue to develop my own communication and listening skills. Prior to working on this project, I didn't know much about our Somali refugee community. Having a chance to speak to some Somali refugees in this environment has helped me gain a deeper understanding of their culture and more confidence in trying to bridge cultural gaps that I experience at work among my international students. In fact, my next-door neighbors are a Somali family, and I was able to make a connection with them by waving and shouting "Eid Mubarak!" when they were celebrating the end of Ramadan. Thus, I have really enjoyed this experience, and I'm excited to see what other opportunities might develop as I learn more about MCC and our local refugees.

The issues brought on by immigration are likely to increase given the conflicts in places such as Syria, Myanmar, and Somalia. The dropping birthrate in the U.S. also suggests that we will likely need to increase our encouragement of immigrants in the workforce. SIOP members who have expertise in HR functions can help educate and encourage businesses to consider the immigrant population as a viable applicant pool. Trainers can use their skills in designing and delivering education to help refugees and other immigrants learn English and civics to pass their naturalization test for citizenship. I-O psychology practitioners and academics who are passionate about diversity in the workplace can find unique and creative opportunities to connect with an interesting and varied group of people in their own communities and identify ways that these individuals can enrich the workplace. Using I-O to help the world needn't take place in other countries; we have so many people here in the U.S. that can use our help and guidance!²

Do you know of someone who is using I-O psychology to heal the world?

WE NEED YOU AND YOUR INPUT! We are calling upon you, the global I-O community, to reach out and submit your experiences for future columns. Give us your insights from lessons learned as you help heal the world.

To provide any feedback or suggestions on the International Practice Forum, please send an email to the following address: lynda.zugec@theworkforceconsultants.com

Note

¹ Throughout this article, I will primarily use the term refugee, as the organization I work with is aimed at this population; however, many immigrants who have left their countries voluntarily may also benefit from these programs.

² I would like to extend a thank you to Jessica O'Brien and Walter Reichmann on their helpful feedback on this article.

Designer or No Name? How to Optimize Social Media for Your Personal Brand

Jessica Sorenson, Thomas Sasso, and Grace Ewles University of Guelph

As graduate students we spend a substantial amount of time preparing for our future by developing the necessary skills and credentials to succeed in research or practice. However, we often fail to consider how to best communicate these aspects of our expertise and training to fellow researchers, peers, supervisors, or potential employers. This component of professional development is critical to establishing your own unique niche in a competitive job market. In the words of branding expert **Tiffany Poeppelman**, "if you're not branding yourself, you can be assured others are doing it for you. A brand is your reputation, professional identity, and how you show up" (personal communication, August 25, 2016). In this TIP-TOPics column, we explore how to create and sustain your own personal brand using social media to optimize your network and create impact so others are less likely to do it for you.

Just as a company might brand itself to target a specific market, individuals can develop a personal brand to target specific audiences. In this sense, branding is a form of self-presentation to influence how others perceive you. Your personal brand can be shaped by what you say, what you do, and what others say about you; based on your identified audience, you can tailor your strategies for maximum impact. One of the most common tools for personal branding is social media, given the multitude of platforms and extensive reach.

Despite the ease of communication, the dominance of social media has created considerable challenges for crafting a professional image. Self-presentation is no longer just about the persona in your physical interactions, your digital footprint must also reflect a professional identity that sells our best (yet authentic) selves. As graduate students, we use social media for both personal and professional purposes. This includes communication, collaboration, education, and entertainment. We connect with others on Facebook walls and groups, share information with colleagues on LinkedIn, read recently published work that has been tweeted out, and we partake in the "occasional" online game or gossip story about the last episode of *Real Housewives*. But our online activity is not just a place to escape; it is a frontier of new possibilities to develop our professional identity. Graduate school is the "perfect time to start shaping one's personal brand as it's the best time to begin thinking about your value proposition and differentiators in the market" (T. Poeppelman, personal communication, August 25, 2016). Find what you love, and use that to create a name for yourself. You want to add value, and your expertise as a graduate student situates you in a position to provide meaningful contributions on social media.

Dutta (2010) framed social media as being useful for three purposes: constructing your brand, outreach, and learning. Social media contributes to branding through the construction of an online identity that fosters a professional and personal image. What someone posts, retweets, or comments about online may be associated with that person and reflect on how others perceive that individual. The way you brand yourself on social media will be viewed by those who know you and those who have never met you before. If you think about your social media presence as a constant introduction to new people, what is your brand telling them? Will

they understand your sarcasm and humor? Are you presenting someone that is credible, intelligent, and likeable? What you do on social media is a source of information that individuals will use to try to understand you and your brand.

The influence of branding is important because social media also increases outreach. You can sit at your computer in Wichita and instantly have access to communicate with potential collaborators in Barcelona or Melbourne. Your post from Buenos Aires on LinkedIn about a great article in the *Harvard Business Review* can resonate from Oslo to Cape Town. Your network of potential future employers, employees, and clients has shifted from your local young professionals networking event to a diverse global network.

However, it is not just geographic outreach that expands with social media, your brand becomes accessible across time, too. In the realm of social media, something you posted or liked 2 years ago, or during a night out, can come back at the most inopportune time to haunt you, such as during a job interview. Remember that what you do on social media can often be dispensed by others without your permission. As your audience and outreach expand, so too does the risk of developing a consistently professional brand.

The third purpose of social media noted by Dutta (2010) was the impact on learning. Online platforms provide an opportunity for you to engage with new content constantly. You can use social media to learn what others are doing to prepare for the job market, think tank a roadblock with your thesis by posting on your Facebook page, or engage in debates about topics that will expand your knowledge and interests. Social media provides you with a tool for quick, responsive, and interactive feedback.

The Industrial and In

Various social media platforms offer graduate students a quick, cheap, and easy medium for crafting your brand and connecting with people and organizations with whom you might not otherwise get an opportunity to connect. However, it is helpful to keep in mind which platform is most useful or best suited for your brand. One suggestion is to stick to what you prefer or already use regularly, as it can be "a common misconception that you need to use them all" (T. Poeppelman, personal communication, August 25, 2016). Our list is not exhaustive, there are certainly other platforms (e.g., ResearchGate, blogs, Instagram, Pinterest), but regardless of which platform you choose to make use of for getting your name out in the world, it is important to think about your target audience, message, and the best use of this particular platform. Not only does this benefit your personal brand, but it also builds recognition for I-O psychology more generally (Poeppelman & Blacksmith, 2014). As graduate students we benefit if our credentials in I-O psychology are recognized and respected by a larger audience.

Tip from Tiffany Poeppleman:

1. Pay attention to the ways that other well-known I-O psychologists "engage, lead, and guide discussions to establish their professional brand online and offline" (personal communication, August 25, 2016).

LinkedIn

One of the more well known social media platforms that can be utilized for crafting your professional brand is LinkedIn. This platform can get a bad rap due to the argued impersonal nature and for allowing overzealous connections. Although the primary function of LinkedIn is to share your credentials, it is also useful to communicate your professional ideals, goals, and maintain professional connections. Having said this, it is important to make the "right" connections on LinkedIn, including key people in your field and applicable groups or influencers. Moreover, in order to optimize this platform, you must customize and continually invest time in your profile, not only to remain current but to inform your connections of your ongoing training and development.

Tips from TIP-Topics:

- 1. Customize your profile to let your professional personality shine by using your summary to communicate a short and impactful message. For example, if you have minimal work experience, focus on communicating your purpose or goals. In the words of Simon Sineck (2009) "people don't buy what you do, they buy why you do it." Or perhaps you can use your summary to answer the question we posed to you in our first column, "What do you hope to contribute to society?"
- 2. Maintain the interest of your key connections by liking, sharing, and commenting on their posts. This keeps your name in their minds and in the minds of any of their connections that might view your activity. You can also have more impact by keeping specific people in mind to share things with, and sharing posts across connections who may benefit from a conversation on a certain topic.

Twitter

Twitter is a fascinating social media platform that operates in contradiction to most of our graduate education. Twitter gives you 140 characters to make your point #KeepItShort #BeConcise. As a platform it is relatively straightforward and easy to use for establishing a professional brand with diverse audiences (i.e., academics, practitioners). When effectively used, your tweets are an opportunity to create interest in you, your ideas, and your work. A tweet should entice someone to want to hear more from you. Therefore, the majority of your effort on Twitter should be spent providing unique, beneficial, and specific content that demonstrates to others your expertise.

Tips from TIP-Topics:

- 1. Your username should be short and appropriate. Share your handle on conference presentations, business cards, and your email signature.
- 2. Have a Twitter bio that mentions topics you often tweet about. If that includes being a foodie, include it. Twitter thrives from a more humanized approach.
- 3. Find Twitter mentors. Follow users with similar interests from whom you can learn; model their style but don't replicate their content.
- Follow organizations and thought leaders in your field. Don't be afraid to tweet them
 when you have a novel contribution to make. You might even get a retweet across their
 network.

- 5. Use trending hashtags commonly used by others with your interests (e.g., #diversity #iopsychology #SIOP). Avoid unique hashtags; although entertaining, they won't maximize your visibility.
- 6. If you want to initiate a more meaningful conversation, direct message someone. Tweets entice short term communication, but longer conversations are better elsewhere.

Facebook

Despite being primarily used for social reasons, Facebook still offers opportunities to build personal brands, including the use of groups to organize large numbers of people, share/seek resources, and engage in conversations. Even some SIOP committees have groups for sharing resources around topics related to the purpose of the committee (e.g., the Committee on Ethnic Minority Affairs). These groups can be helpful to gather resources and connect with a wider group of people that you might struggle to connect with otherwise. Also, we cannot deny the inherent ability of Facebook to do what it was originally designed to accomplish: connect classmates. We've been told, and truly believe, that you make some of the best friends in your life in graduate school. Facebook not only helps you build these friendships, but also helps you keep them once graduate school is done. It offers a deeper, more personal, connection for those individuals we would rather call friends than colleagues.

A Tip from TIP-Topics:

1. Know your privacy settings, as they are often more complex than you might think!

The Industriconclusionanizational Psychologist

Crafting your brand takes time and effort to do well. None of us are social media experts; our LinkedIn pages aren't always updated, we retweet without adding content, and our Facebook contains more memes of adorable animals acting like humans than is justifiable. But we are engaging in the process of getting better and being more active users of social media to shape our brand. We are critically thinking about what we each want our social media presence to say about us.

Start by asking yourself for what do you want to use a social media platform. For one author, Twitter and LinkedIn are professional platforms, and Facebook is a personal platform. As a result, someone may be denied a Facebook friend request but accepted on LinkedIn. Strategically comb through your contacts who have access to your profiles and refine your list to those you know well enough to trust with your personal information (the content we want our mothers, best friends, and employers to see are very different).

If you are using social media for a professional brand, remember to reflect before putting content out. Is it something you will want attributed to you in the future? Occasionally go through your social media accounts and look at past items posted. By deleting things you don't like any more you are demonstrating a change in your brand.

We are reminded of the old adage, there are consequences for your actions. That holds true with how you engage with social media. Some of those consequences might be positive; and other times, you might be able to live with the negative repercussions. But in spite of all this talk about risk and careful management of your social media brand, don't forget to have

fun with it. Do you want to Instagram your food? Go ahead. Do you want to notify the world that you loved the new Ghostbusters movie and think others should see it? Go for it. Social media is a creative way to engage with the world around us, personally and professionally, and no brand is more unique than you presenting your authentic self. Tiffany Poeppelman, a branding expert, highly recommends "bring[ing] some personal content and show[ing] who you are as a person" (personal communication, August 25, 2016). By showcasing your personality, you distinguish yourself from others and leave a lasting impression on the reader.

We like to think of your brand as going white water rafting down a river of tumultuous rapids. You can shift your boat in certain directions to avoid the rocks, but at the end of the day you are going to get wet, and you are likely to hit a few bumps along the way. Social media is social, and as such others have a significant impact on your online presence. Others may post things about you, readers of your online output may perceive what you wrote in a way you didn't intend, and online trolls may seek to bring you down. You have to work to keep your boat safe, but you can never completely control your experience unless you opt not to go in the first place. But if you don't get in the raft, you are missing out on some incredible opportunities that may lead you toward your desired destination.

References

Dutta, S. (2010). Managing yourself: What's your personal social media strategy. *Harvard Business Review*, 1-6. Retrieved from https://hbr.org/2010/11/managing-yourself-whats-your-personal-social-media-strategy

Poeppelman, T. R., & Blacksmith, N. (2014). Personal branding via social media: Increasing SIOP visibility one member at a time. *The Industrial-Organizational Psychologist*, *51*(3), 112-119. Sinek, S. (2009, September). *Simon Sinek: How great leaders inspire action* [Video file]. Retrieved from https://www.ted.com/talks/simon sinek how great leaders inspire action

tion?language=en

SIOP in Washington: Advocating for I-O in Federal Public Policy

Since July 2013, SIOP and Lewis-Burke Associates LLC have collaborated to make I-O science and research accessible to federal and congressional policy makers. SIOP has embedded a foundational government relations infrastructure within the organization, enabling SIOP to develop an authoritative voice as a stakeholder in science policy in Washington, D.C. and to promote SIOP as a vital resource for evidence-based decision making.





Jill Bradley-Geist, University of Colorado Colorado Springs, and Laura Uttley, Lewis-Burke Associates LLC

Update on the Department of Labor's Overtime Rule

On May 18, the Department of Labor (DOL) released its <u>final rule</u> to modify the existing over-time pay regulations covered under the *Fair Labor Standards Act* (FLSA). The final rule, which was officially published in the Federal Register on May 23, raised the salary threshold for salaried executive, administrative, and professional employees to qualify for overtime pay, from \$455 per week (\$23,660 per year) to an estimated \$913 per week (\$47,476 per year). Employers are expected to be in compliance by the time the rule goes into effect on December 1, 2016.

DOL received nearly 300,000 comments on its July 2015 Notice of Proposed Rulemaking updating the salary threshold for overtime pay, outlining concerns and impacts of the proposed rule. In the end, DOL did not alter the final rule significantly from the proposed rule. DOL slightly lowered the salary threshold from the proposed \$50,440 to the final \$47,476 annual salary level. According to DOL, this new threshold reflects the 40th percentile of full-time salaried workers in the lowest-income Census region in the country. Another modification is that the final rule mandates the salary threshold be automatically updated every three years to reflect the 40th percentile level of salaried workers in the lowest-wage region.

According to the DOL, employers have several options available to comply with the updated salary threshold, including:

- Raising salaries to the new threshold;
- Limiting work hours to 40 hours per week;
- Offering comp-time in place of overtime pay (for public institutions);
- Redistributing workload to minimize overtime;
- Paying overtime to employees whose salaries are below the threshold; and
- Adjusting base pay and paying overtime for employees who work a small number of hours of overtime on a predictable schedule.

Congressional Pushback

On June 7, the Senate Committee on Health, Education, Labor, and Pensions (HELP) Chairman Lamar Alexander (R-TN) and Senate Committee on Homeland Security and Governmental Affairs Chairman Ron Johnson (R-WI) introduced a <u>joint resolution</u>, along with 43 Republican Senate co-sponsors, aimed at blocking the implementation of the Department of Labor's final rule to raise the salary threshold for employees eligible for overtime pay. On the House side, House Committee on Education and the Workforce's Subcommittee on Higher Education and Workforce Training Chairwoman Virginia Foxx (R-NC) introduced the House <u>companion resolution</u> on June 16. Twenty-six Republican Members of the House have co-sponsored the resolution.

The resolution of congressional disapproval utilizes a procedural tactic, the *Congressional Review Act*, which allows Congress to overturn the executive branch's regulatory proposal within 60 days of release if the resolution passes both chambers and is signed by the President. If this resolution reaches the President's desk for signature, President Obama would likely veto the resolution, sending it back to Congress where it would need a two-thirds vote of both chambers

to become law. Given this challenge, the likelihood for a legislative block to the new overtime rule is low.

Advocacy in Action: SIOP Member Snapshot





Lynda ZugecManaging Director
The Workforce Consultants

Winny ShenUniversity of Waterloo

Beginning in this TIP issue, we will be featuring SIOP members who are engaging in government advocacy work. This month, we follow SIOP members Lynda Zugec and Winny Shen who spearheaded a response to the Canadian government's recent request for information on flexible work arrangements. To tell us about your own advocacy-related work, please contact current Government Relations Advocacy Team committee chair, Jill Bradley-Geist at jill.bradley-geist@uccs.edu.

Using Science to Choose the President

Jessica Deselms, Lauren Bahls, Kristie Campana, and Daniel Sachau

A publication of the Minnesota State University, Mankatoational Psychology, Inc.

What if the president of the United States of America was *selected* rather than *elected*? In other words, what if candidates applied for the job of president in much the same way that executives apply for the job of CEO? What would the selection process look like? What knowledge, skills, and abilities would the ideal presidential candidate possess? I-O psychologists are all over the place in government work. For example, SIOP's GREAT committee advocates for evidence-based decision making in government. Many I-O psychologists work within government agencies such as the TSA, the FBI, OPM, and the Social Behavioral Sciences Team. There are also plenty of I-O organizations that often subcontract with the government, including FMP, Hum-RRO, and PDRI. Clearly, I-O psychologists are deeply involved in many government processes. Why not selecting a president? We posed these questions during interviews with a variety of SIOP members. We are not suggesting a change in the Constitution. Consider this as a kind of thought experiment in employee selection.

Job Analysis

All of our respondents thought that, as in any selection process, job analysis should be the first step. Let's find out what a president actually does. Here is where the problems start. First, there is no official job description for the president, and the Constitution only offers 322 words on the

matter. Next, only a very small number of people have access to the day-to-day activities of a president. Further, the public's understanding of the president's job is clouded by political pundits who opportunistically inflate or minimize the president's role in world events. Does a president have control over our economy? The answer depends on which party you ask and how well the economy is doing. It is safe to say the president's duties are varied. Presidential diaries tell us that a typical day in the life of president might include signing legislation, receiving security briefings, attending an awards ceremony, hosting dinner parties, and meeting with heads of state.

What Constitutes Successful Presidential Performance?

Even if we could get our hands on a comprehensive job description, a criterion problem looms large. What criterion should be used to measure the success of the president? As Doug Molitor (3M) states, "One person's good president is not necessarily another person's good president." Rob Ployhart (University of South Carolina) echoed this concern, "What we want the president to do is divided by different stakeholders." Setting benchmarks for presidential performance is further complicated by the tenuous link between policy and effect. Success and failure are not immediate. For instance, Kasey Guentert (Korn Ferry Hay Group) notes that people still debate the success of FDR's strategies, and there may be "economic repercussions from his policies that have yet to happen." Another problem with performance criteria is that they shift. Eric Heggestad (University of North Carolina Charlotte) noted that in 2008 the country was seeking a candidate who could lead us out of a financial crisis. It appears that in 2016, the key criterion is a candidate who can navigate divisive social issues. A third problem with the criteria was noted by Nancy Tippins (CEB), who stated, "The job shapes the president, and the president shapes the job." Job skills play out differently for different presidents. Charm and warmth worked well for Reagan but not so well for Carter. Lyndon Johnson, generally unlikable, managed to get just about anything he wanted through Congress. So, similar skills deployed differently can lead to vastly different outcomes. Finally, another problem is that the measure of success is determined by voters. As Molitor put it, what makes a good president is whether he or she is "able to make people think he or she is a good president." Jose Cortina (George Mason University) was more direct: An effective president might be one who is good at "snowing voters."

Let's say we could overcome the criterion problem and we decide to conduct a job analysis, there is yet another roadblock: Who should do it? We know that who we choose as SMEs matters a great deal (Morgeson & Campion, 1997). The choice of SMEs is not obvious in this case. **Dick Olson** (Olson Consulting) and **Carol Lynn Courtney** (Courtney Consulting) noted that former presidents and selected members of Congress likely have intimate knowledge of the president's job (for the curious reader, Obama recently outlined his typical day on The Oprah Winfrey Show, which you can view here: https://www.youtube.com/watch?v=zBlToJwaD4g). **Leaetta Hough** (HirePayoff, Dunnette Group) suggested polling a diverse group of constituents. Doug Molitor recommended that the chief of staff, Joint Chiefs of Staff, or the press secretary would be excellent resources for job information. We will not pretend that party lines wouldn't be a problem.

Presidential Tests

Even though it is difficult to define *good* presidential performance, and Republicans and Democrats would spend years arguing over who should do the job analysis, our colleagues had a number of interesting recommendations for tools that could be included in a presidential selection battery. Biodata, job experience, and archival data were popular suggestions. Among others, **Paul Sackett** (University of Minnesota) and Tippins cited the adage that "past behavior predicts future behavior." Courtney identified some key differentiators, such as international experience and cultural competency. Heggestad proposed coding public records for key behaviors.

A number of our respondents suggested, quite reasonably, that presidential candidates should be intelligent, but even this came with caveats. Ployhart, Sackett, and **Chuck Lance** (Organizational Research & Development) warned about issues with range restriction. Despite what *Huffington Post* or *Fox News* grumpily insist, most presidential candidates are bright. A number of people noted that in addition to focusing on raw intelligence, it would be useful to examine cognitive processes. For instance, Cortina mentioned that it would be wise to examine candidates' epistemology: Does the candidate believe something to be true because of evidence or based on wishful thinking?

Personality assessments were popular recommendations. Most respondents believed that the Big Five might be too broad, but Guentert suggested that the ambition and drive subfactors could be helpful. Rubenzer, Faschinbbauer, and Ones (2000) conducted a clever study where they asked presidential biographers to complete the Big Five for their respective presidents. They found that presidents were rated lower on agreeableness, lower on openness to experience, and higher on extroversion than the typical person.

SIOP members' suggestions for presidential skills and abilities also included tolerance for ambiguity, decisiveness, negotiation skills, and social skills. Most of our colleagues identified some component of integrity, commitment to country, and ethics. Olson and Courtney suggested that compassion, self-understanding, and "not taking yourself too seriously" might be keys to presidential success. Heggestad suggested that it would be nice to see the MMPI profile of candidates but recognized the legal pitfalls of that suggestion. Regarding the suggestion of integrity, we would certainly prefer our presidents not take bribes, but what other behaviors are relevant? Does integrity in one's personal or family life apply? Lance wryly questioned whether we would want integrity at all; presidential business can be dirty work, and someone who is shrewd and calculating may ultimately make the decisions that would be in the United States' best interest.

Presidential assessment centers were a common suggestion. This makes good sense, considering that many CEOs go through these types of assessments, and they offer incremental prediction over cognitive tests (Krause, Kersting, Heggestad, & Thornton, 2006). Given that the president is much like the CEO of the government, this approach might be a sensible fit. Sackett referenced former SIOP President **Ann Howard**, saying, "if it exists, it can be measured; if it can be measured, it can be measured with an assessment center." There was great overlap regarding the types of exercises that could be incorporated into an assessment center and competencies to examine, including negotiation, interface with foreign dignitaries, natural disaster, and

handling of day-to-day activities. Certainly developing a presidential simulation would be complex, and would likely need to encompass both mundane and critical situations. As we have seen during Obama's presidency, achieving cooperation among diverse stakeholders is of critical importance. A role-play exercise would need to illustrate how candidates can build consensus with rival political groups, negotiate with foreign leaders, and work with the press secretary to make decisions about how to keep the public appropriately informed. Creating a scenario for this with appropriate complexity would be difficult. Tippins and Molitor mused as to what a "Bay of Pigs" simulation would look like, and how the current candidates would handle it.

As an interesting aside, it appears that presidential simulations have been created in the past. Typically, they are intended as a way to ease the transition from one president to the next. In 2012, former Governor Mike Leavitt designed a "Romney Readiness" team that was intended to be a miniature government that Romney could explore should he win the election. Clearly, they never had a chance to launch this initiative, but Minnesota Public Radio provided a brief interview with Leavitt, which you can find here: http://www.npr.org/2016/08/01/488274034/white-house-begins-transition-planning-4-months-ahead-of-election-day. This was meant more as a training exercise, but it would be interesting to translate this concept into a selection simulation.

One key consideration that came up again and again was the issue of leadership. A number of interviewees argued that the president has limited power and may have actions blocked by Congress or the Supreme Court. Along with leadership neutralizers, many of our colleagues discussed the importance of leadership substitutions. Sackett noted that the role of president is so immense, that nearly everything must be delegated to the cabinet or other staff.

Heggestad and Hough specifically referenced transformational leadership. Hough noted that key components of the theory, such as inspiring trust, innovative thinking, maintaining and building relationships with diverse people, and visionary thinking would all be helpful in the presidency. Researchers have suggested that President Obama, on the campaign trail, used charisma and inspiration to gain the presidency with relatively little experience; whether he continued to be transformational in the White House is a subject of great debate (Bligh & Kohles, 2009). On a related note, a number of respondents mentioned that the KSAs it takes to win a nomination might be quite different from the KSAs needed to be an effective president.

The Tradition of Elections

It is worth noting that a few of our interviewees insisted that presidential selection would be ill advised and that the election should stay in place. For instance, **Ben Schneider** (Schneider Consulting) is an advocate for the current system. He stated that the "trial by fire in the political arena" approach is the one to continue. Lance also supports the election system, arguing that it is a "moot point—presidents serve at the whim of the electorate." Naturally, supporting the validity of our system will be difficult, with our small *N* (we would hopefully only add one data point every 4-8 years). Perhaps synthetic validity could be pursued, but linking CEO performance to presidential performance will be a tricky task and may miss key components of the president's job that are not echoed in the private sector.

Many other respondents indicated that they find comfort in an election. As Ployhart stated, "At the end of the day, if it was truly for the president, I would still want an election... If

in our hypothetical world we gave [our selection battery] to every presidential-eligible citizen in the country and picked the person who comes out the highest... would you be comfortable without having an election?" Alas, these colleagues will ultimately have their way. As we near the end of this election cycle, we will all cross our fingers and hope that the successfully elected candidate knows what he or she is doing. Let's hope that we don't find ourselves longing for a presidential selection!

References

- Bligh, M. C., & Kohles, J. C. (2009). The enduring allure of charisma: How Barack Obama won the historic 2008 presidential election. *Leadership Quarterly, 20,* 483-492.
- Krause, D. E., Kersting, M., Heggestad, E. D., & Thornton, George C., III. (2006). Incremental validity of assessment center ratings over cognitive ability tests: A study at the executive management level. *International Journal of Selection and Assessment*, *14*(4), 360. doi:http://dx.doi.org/10.1111/j.1468-2389.2006.00357.x
- Morgeson, F. P., & Campion, M. A. (1997). Social and cognitive sources of potential inaccuracy in job analysis. *Journal of Applied Psychology*, *82*, 627-655.
- Rubenzer, S. J., Faschingbauer, T. R., & Ones, D. S. (2000). Assessing the U.S. presidents using the Revised NEO Personality Inventory. *Assessment, 7*(4), 403-419. doi: 10.1177/107319110000700408

More Reading

- Rubenzer, S.J., & Faschingbauer, T. R. (2004). Personality, character & leadership in the White House: Psychologists assess the presidents. Washington, DC: Brassey's.
- Simonton, D. K. (2002). Intelligence and presidential greatness: Equation replication using updated IQ estimates. In S. P. Shohov (Ed.), *Advances in psychology research* (pp. 143-153). Hauppauge, NY: Nova Science Publishers.

Toward a Critical I-O Psychology

Nathan Gerard California State University, Long Beach

Introduction

Over the past decade, critical scholarship in the field of management has experienced a veritable explosion. A burgeoning new area of research, teaching, and practice under the name of "critical management studies" (CMS) has inspired numerous course readers (Alvesson & Willmott, 2011a, 2011b, 2011c, 2011d; Grey & Willmott, 2005), handbooks (Alvesson, Bridgman, & Willmott, 2011; Prasad, Prasad, Mills, & Mills, 2016), textbooks (Alvesson & Willmott, 2003; Tadajewski, 2011), and practitioner guides (Cox, Letretn-Jones, Voronov, & Weir, 2009; Malin, Murphy, & Siltaoja, 2013), not to mention a recent "All-Academy Conference Theme" at the annual

meeting of the Academy of Management ("Capitalism in Question" in 2013). Despite this momentum, critical scholarship has yet to penetrate the closely related field of industrial-organizational psychology.

In this paper, I introduce the critical scholarly tradition to scholars and practitioners of I-O psychology in the hopes of stimulating dialogue. I begin with an account of the critical tradition's intellectual history in relation to two better-known traditions in the social sciences. I then go on to demonstrate how a critical vantage cultivated from the critical scholarly tradition can offer (a) new approaches to theory-building, (b) new methodologies for research, and (c) new frameworks for practice. The result is a preliminary outline for a new sub-field of study called "critical I-O psychology."

Three Scholarly Traditions

As scholars and practitioners of organizations, we rarely explore the history of ideas that determine what we do and who we are. Doing so, however, can be an invaluable exercise not only for illuminating the present but also for shaping the future. In this section, I explore the intellectual origins of three scholarly traditions in the social sciences—positivist, interpretive, and critical—demonstrating how each influences our contemporary understanding of organizational life. Through this exercise we may better understand the unique "value-add" of adopting a critical approach to I-O psychology.

As is well known, the bulk of ideas in psychology, including I-O psychology, derive from the positivist tradition in the social sciences (Allport, 1954, 1968; Comte, 1854). As a testament to this tradition's dominance, the characteristics of positivist research read simply like a checklist of good research: controlled experiments and quantifiable variables, formal propositions and hypothesis testing, generalizations from a sample to a stated population, the use of inferential statistics to "discover" causal laws; researcher detachment, random assignment of subjects, and control over confounding influences (Adler et al., 2008; Alvesson & Deetz, 2000; Orlikowski & Baroudi, 1991).

Less known are the underlying assumptions informing this dominant tradition. Chief among these is the assumption that concepts and methods employed in the natural sciences apply in a more or less direct manner to the formation of a "science of society" and "science of mind" (Giddens, 1974). The origins of this assumption can be traced to Descartes' (1641) deductive method for arriving at knowledge, and specifically his conviction that if mental events were ordered and connected (Descartes' "clear and distinct ideas") then so too must reality. The British empiricist philosophers (Bacon, Locke, Berkeley, and Hume) would share in Descartes' conviction but trade reason for a posteriori experience as the vehicle for contacting reality. Out of this seminal thinking emerges the hypothetic-deductive (i.e., scientific) method, the backbone of positivist research (Popper, 1934).

The positivist tradition does not, of course, hold a monopoly on scholarship in I-O psychology. The interpretive tradition (as the name implies) explores the social world through the process of interpretation, a process often juxtaposed with explanation. This tradition has its roots in the 18th century Italian philosopher Giambattista Vico's (1725) proposal for an alternative to the Cartesian approach to arriving at knowledge. When studying the human, Vico insists, one must employ methods driven by sympathy and not by Cartesian doubt (Belaval, 1969; Berlin, 1976).

The 18th and 19th century German Geisteswissenschaften tradition of human sciences would help solidify Vico's beliefs with their emphasis on meaningful interpretation over causal explanation (Dilthey, 1961). Out of these roots emerge the social constructionist (Gergen, 1973), phenomenological (Giorgi, 1970), and hermeneutic (Messer, Sass, & Woolfolk, 1988) strands of psychology, elements of which can be found informing qualitative approaches in I-O psychology (Locke & Golden-Biddle, 2002). Millward's (2006) recent longitudinal study of retention among working mothers, for instance, in which extensive, first-hand accounts of sense-making processes are interpreted in the context of identity management and the evolving psychological contract, serves as a clear example of this tradition's influence on our field.

The critical tradition, in contrast, is the least known to psychology and virtually nonexistent in I-O psychology. Like the above traditions, however, it enjoys a distinct lineage of thought and set of philosophical commitments. This lineage begins in earnest with Immanuel Kant, and specifically his famous trilogy of critiques (Kant, 1781, 1788, 1790) in which Kant unveils the nature and limits of human knowledge in the wake of the scientific revolution. For Kant, ideas (including scientific ones) reside in a broader "totality" beyond appearance. Also within these works, Kant puts forth an elaborate defense of human freedom in the face of determinist arguments. This dual commitment to critique and emancipation provides the intellectual framework for the critical scholarly tradition (Critchley, 2001).

Two more theorists prove seminal to establishing the critical tradition's intellectual foundations. The first, Georg Hegel (1807), deepens Kant's critical project by revealing its historical contingency, while the second, Karl Marx (1845), inverts Kant's idealism into a materialist theory based on the development of human productive power. For Marx in particular, societies rise and fall not because of their ideas but because of their simultaneous cultivation and containment of human productivity—an argument encouraging the study of forces and structures beyond the intersubjective world that shape behavior.

In light of this history, the distinguishing features of critical scholarship come into clear focus. Unlike positivist and interpretive scholarship, which largely take for granted institutional power relations permeating social phenomena (and by extension their own research), critical scholarship aims to incorporate these relations into its frame of reference, focusing on the broader totality of forces underpinning social reality. Returning to the topic of retention, for instance, this would entail examining who this topic serves (e.g., labor or management), who or what gets left out (e.g., the "un-retained") and what, in turn, gets reinforced (e.g., managerial bias; see Brief, 2000).

Through clarifying this totality of forces underpinning social reality, critical researchers begin to make good on their emancipatory aim. If, paraphrasing Marx (1845), the role of critical scholarship is not only to interpret the world but also to change it, critical researchers strive to change this world by cultivating a collective awareness of the various forms of social domination in peoples' lives. This cultivation can take the form of re-ordering meanings, raising awareness and/or challenging social domination (Malin, et al., 2013). (See Table 1).

Positivist

Intellectual origins	Rene Descartes & the British Empiricists; Auguste Comte	Giambattista Vico; The Geist tradition of human sciences	Immanuel Kant; Georg Hegel; Karl Marx
Underlying assumptions	Social nature as factual and objective Social order found in law-like, linear regularities	Social nature as constructed Social order found in shared norms and interests	Social nature as a broader totality of forces Social order found in asymmetric power relations
Interest/aim	Prediction and control	Meaning and understanding	Critique and emancipation

Interpretive

Critical

In what follows, I outline in further detail how insights gleaned from the critical scholarly tradition can offer (a) new approaches to theory building, (b) new methodologies for research, and (c) new frameworks for practice in I-O psychology.

Critical Theory-Building

Ideally, theory should help us uncover aspects of our lives other than those we've already thought of, challenging us to think and act differently (Becker, 1998). As Clifford Geertz (1995) reminds us, "we are in no danger of running out of reality; we are in constant danger of running out of signs, or at least of having the old ones die on us" (p. 19). In contrast with the positivist ideal, the aim of critical theory building is not to produce neutral signs that closely mirror reality (Eisenhardt, 1989) but socially and politically engaged signs that challenge our very sense of reality, pointing us to unfamiliar terrain.

Critical management scholars Mats Alvesson and Dan Kärreman (2007, 2011) fashion an approach to critical theory-building based on the guiding metaphors of friction and breakdown. Friction, and in particular the friction that arises between theory and reality, leads to a breakdown that in turn leads to seeing things differently. "In any kind of study," Alvesson and Kärreman (2011) point out, "there is always the potential for something that will speak out sufficiently firmly against the assumptions and reasoning that the researcher holds and is engaged in" (p. 20). Critical theory-building entails not shying away from these breakdowns, paying attention "to what does not work in an existing theory" and looking for what remains hidden or left out of our existing frameworks (Alvesson & Kärreman, 2007; p. 1266). "Breakdowns may appear problematic initially, but they also create spaces where imagination can be put to work" (Alvesson & Kärreman, 2011, p. 18).

The critical tradition's focus on the process of theorizing has direct implications for I-O psychology, and particularly for the concepts we prioritize in our scholarship. In a rare endogenous critique of our field, Brian Steffy and Andrew Grimes (1992) challenge us to consider how I-O

concepts might be "infused with the values and political aims of the designer of the concepts" (p. 186). By acknowledging these values and aims, we might resist the temptation to steadily dilute our concepts from a complex (and often highly contentious) totality to an isolated state of mind, thereby evacuating not just meaning but also politics and history. One early exemplar in this regard is Walter Nord's (1977) "Job Satisfaction Reconsidered," a theoretical study exposing the "prevailing social, political, and economic values" that arbitrarily limit this classic I-O construct (p. 1027). As an alternative, Nord (1977) advocates for a wider perspective on job satisfaction: "Instead of attempting to design work that is maximally satisfying under an existing set of political, economic, and social structures, these structures must be viewed as variables whose effects on the nature of work and other aspects of organizational life are central to our analysis" (p. 1032).

More generally, by encouraging a wider dialogue around theory, the critical scholarly tradition offers I-O psychologists new ways of asking questions about organizational life. That these questions may not conveniently fit with conventional methods is all for the better, for it pulls us out of our comfort zone to explore new methods.

Critical Methods

If the positivist tradition runs the risk of depleting the complexity of organizational life by prioritizing measurement over meaning, the interpretive tradition makes room for meaning but tends to neglect politics and history. I-O psychologists may salvage the complexity of organizational life while retaining its sociohistorical and political dimensions by branching out into the relatively "unorthodox" critical methods.

Many if not most critical methods share affinities with the interpretive tradition, but with the added proviso of a critical edge. Critical discourse analysis (CDA), for instance, emerges from the social constructionist-inspired method of discourse analysis (Parker & Shotter, 1990; Potter, 1996; Potter & Wtherel, I1987) but with added focus on the regimes of power that infuse language use (Alvesson & Kärreman, 2000; Foucault, 1980; Hardy, Palmer, & Philips, 2000). Similarly, critical ethnography draws from the interpretive method of ethnography, but with added focus on power, ideology, and societal structure (Elmes & Costello, 1992; Madison, 2012; Rosen & Ashtley, 1988).

Intriguingly, one of the first CDAs (Mills, 1948) was conducted on the discourse of Elton Mayo's school of human relations. "If we coded all the terms referring to managers and to workmen in this literature," writes the sociologist C. Wright Mills (1948), "[we]...find that managers are most frequently seen along lines of intelligent-unintelligent, rational-irrational, knowledge-ignorance; whereas workmen are seen most frequently along the lines of happy-unhappy, efficient-inefficient, good morale-bad morale" (p. 23). This contrast leads Mills (1948) to rhetorically ask, "how much of the advice, given and latent, can be picked up with the simple formula: to make the worker happy, efficient, and cooperative we need only make the managers intelligent, rational, knowing? Is this the latent political formula of human relations research in industry?" (p. 23).

Mills' research calls into question the rather sanguine use of language by present-day I-O psychologists. How, for instance, might terms invoking the valorized ideals of sport ("talent,"

"coaching," "fit"), community ("values," "culture"), and education ("learning and development")—all of which carry a benign and even uplifting tone—actually function to conceal the autocratic functioning of organizations that (ironically) precludes the realization of these very ideals?

To complement this focus on text and speech, critical researchers capture the lived experiences of workers through the method of critical ethnography (Elmes & Costello, 1992; Madison, 2012; Rosen & Astley, 1988). Recent critical ethnographic studies of organizational life have examined how cultural change programs aimed at bolstering employee commitment also serve as mechanisms for achieving control over employees through regulating their identities (Casey, 1999; Kunda, 1992; van Maanen, 1992) whereas others have explored how the rise in identity regulation at work (Hochschild, 1983) spills over into workers' nonwork lives (Fleming, 2005, 2009; Gregg, 2011). I-O psychologists, often narrowly focused on surveys, rarely examine worker subjectivity in this same manner of depth. Doing so, however, promises to add some much-needed nuance to more mainstream findings, which all too often unwittingly reinforce the status quo (Baritz, 1960; Brief, 2000).

Together, critical discourse analysis and critical ethnography offer two potent methods for examining the "totality" of contemporary organizational life (for others, see Alvesson & Deetz, 2000). By learning from and ultimately engaging with these methods, we may discover something new about our subject matter (and perhaps even ourselves), and in the process broaden the scope of what constitutes "good" research in I-O psychology (Symon & Cassell, 2006).

Critical Practice

Given the resounding worry over I-O psychology's lack of influence on the world of practice (Gelade, 2006; Hodgkinson, 2006; Silzer, Cober, Erickson, & Robinson, 2008; Wall, 2006), the critical scholarly tradition can inspire new ways to connect with the practitioner community. For starters, critical research has the potential to align more closely with the experiences of workers and managers insofar as it directly confronts the thorny issues of power and politics pervading everyday organizational life (Voronov, Cox, LeTrent-Jone, & Weir, 2009). Practical interventions informed by critical research would be defined by their ability to make explicit the links between social structures and psychological phenomena, with a focus on oppression, manipulation, and liberation (Sullivan, 1984). One current example is the widespread promotion of "participatory workplaces" by The Next System Project, a consortium of prominent academics and advocates seeking to combat the growing disparity of pay and power in organizations through a series of teach-ins, webinars, and videos (Alperovitz, Speth, & Guinan, 2015; Hahnel, 2016).

Education also serves as a central practical terrain for the critical tradition. Unlike their counterparts in sociology, students in I-O psychology rarely require coursework in the philosophy and history of science; coursework that would equip them with the conceptual tools necessary to discuss the historical development of ideas. Crucially, this coursework would also help students understand and spot the threat of "scientism"—the dislocation of science from the sociohistorical realm (Hayek, 1980; Putnam, 1990)—that looms large in many of I-O psychology's ahistorical explanations of behavior (Baritz, 1960; Gerard, 2014a).

Last, insights gleaned from the critical scholarly tradition can motivate us as teachers to seriously consider how our concepts and measures get put to use beyond the classroom. All too

often, I-O psychology curricula prepare students to take their place in organizations in order to improve performance without equipping them with the tools necessary to understand (let alone notice) the struggles for power at work and within modern society. Through a dialogue with the critical scholarly tradition, students "can begin to see themselves in relation to the world around them, and to perceive the workplace as a site within larger economies of power and privilege" (Kinceloe & McLaren, 1994, p. 146-147).

Limitations

Despite having much to offer, the critical scholarly tradition is sure to elicit its share of strong reactions. For many scholars and practitioners in I-O psychology, it may seem to fall victim to a glaring contradiction: How could one possibly be critical of the status quo while residing within it? Moreover, wouldn't "biting the hand that feeds" be, at best, counterproductive, and at worst, career destroying?

To be sure, a critical I-O psychology cannot secure its academic right to exist solely in opposition to the status quo. Such a stance runs the risk of devolving into a parasitic one, whereby critical scholarship merely "feeds" off the mainstream for critical fodder while society's injustices and inequalities carry on unaddressed. The critical tradition's commitment to emancipation is thus essential here, and not solely to offset critique but also to transform it into a positive force. Echoing Karl Weick (1979), "there is a need for a dialectic between criticism and affirmation as modes of apprehending organizations" (p. 12).

More broadly, when weighing the prospects of critical scholarship in I-O psychology, we would do well to highlight the recent inroads forged by critical scholars in the neighboring field of management. Two decades ago, serious consideration of Karl Marx in a business school setting would seem unfathomable; today, however, scholars identified with critical management studies (CMS) are institutional mainstays, and CMS is one of the fastest-growing and internationally-diverse divisions in all of the Academy of Management (Adler et al., 2008). Clearly for the Academy, the value of critical scholarship outweighs its perceived threat. SIOP has little to fear and a lot to learn from this example.

Conclusion

As experts of these strange and complex things called organizations, we enjoy one of the widest remits in all of psychology and yet have failed to make full use of it. Our field's research agendas, however fearless in tackling such important issues as workplace inequality and discrimination, rarely question the institutional structures and ideological forces that leave these phenomena stubbornly intact. Moreover, our field's commitment to applying "the rigor and methods of psychology...to issues of critical relevance to business" (SIOP, 2015), however much rigorous and relevant, arbitrarily precludes issues of critical relevance to broader society (Gerard, 2014b). We owe it to ourselves to think and act more broadly.

The critical scholarly tradition on offer here, with its dual commitment to critique and emancipation, provides just such a vehicle to account for humanity's bigger concerns and in the process expands the reach of I-O psychology.

Notes

Mindful of her philosophical commitments, Millward (2006) clarifies the assumptions underlying her research approach and sets this in contrast to the predominant (positivist) approach of identifying retention predictors.

- 2 Although for forerunners in our field, see Nord (1974, 1977) and Veldsman (1990).
- 3 Brief (2000), for example, observes how we are more prone to study survivors of layoffs than those fired: "Apparently, how these people cope with having lost their jobs is not widely seen as interesting to management scholars as are the job attitudes of their more fortunate counterparts" (p. 347).

4 That we continue to exclude such variables from our analysis, however, suggests more than the simple fact that they defy easy measurement or manipulation; it likely points to a stubborn reluctance to engage with new ideas and experiment with new forms of organizing. On this point, see the illuminating exchange between Locke (1978) and Nord (1978) that arose from Nord's (1977) article.

5 This was the definition of I-O psychology posted on SIOP's homepage up until at least early 2015, a definition I had critically reflected upon in an earlier commentary (Gerard, 2014b). I am happy to report it has since changed to read "issues of critical relevance to individuals, businesses, and society."

6 I wish to acknowledge affinities here with the recent burgeoning activity in humanitarian work psychology (HWP; McWha-Hermann, Maynard, & Berry, 2016), pioneered (in part) by the early calls for an explicit I-O ethics (Lefkowitz, 1990, 2003), In my mind, however, HWP is more an application of existing I-O constructs, methods and approaches to humanitarian causes—what Lefkowitz (2016) calls "the profession as applied to humanitarian agendas" (p. 200)—rather than a fundamental assessment of I-O's underlying assumptions. Moreover, the critical scholarly tradition might question a humanism that fails to interrogate the socioeconomic structure in which it is embedded. It is telling, for instance, that "capitalism" is not mentioned once in McWha-Hermann, Maynard, & Berry (2016). On this point, see Gerard (2014a).

References

Adler, P., Forbes, L. & Willmott, H. (2008) Critical management studies. In J. Walsh & A. Brief (Eds.), Academy of management annals, (Vol. 1, pp. 119–180). New York, NY: Lawrence Erlbaum. Allport, G. W. (1954). The historical background of modern social psychology. In G. Lindzey, (Ed.), Handbook of social psychology (Vol. 1, pp. 3-56). Reading, MA: Addison-Wesley.

Allport, G. W. (1968). The person in psychology: Selected essays by Gordon W. Allport. Boston, MA: Beacon Press.

Alperovitz, G., Speth, J., & Guinan, J. (2015). The next system project: New political-economic possibilities for the 21st century. Report downloaded from thenextsytem.org on 5.20.16.

Alvesson, M., Bridgman, T, & Willmott, H. (2011). The oxford handbook of critical management studies. New York, NY: Oxford University Press.

Alvesson, M., & Deetz, S. (2000). Doing critical management research. London, UK: Sage.

Alvesson, M., & Kärreman, D. (2000). Taking the linguistic turn in organizational research: Challenges, responses, consequences. Journal of Applied Behavioral Science, 36, 134–156.

Alvesson, M. & Kärreman, D. (2007). Constructing mystery: Empirical matters in theory development. Academy of Management Review, 32, 1265–81.

Alvesson, M. & Kärreman, D. (2011). Qualitative research and theory development. Thousand Oaks, CA: Sage.

Alvesson, M. & Willmott, H. (2003). Studying management critically. Thousand Oaks, CA: Sage.

Alvesson, M. & Willmott, H. (2011a). Critical management studies, Volume 1: Origins, developments and debates. Thousand Oaks, CA: Sage.

Alvesson, M. & Willmott, H. (2011b). Critical management studies, Volume 2: Diversity of critical analyses. Thousand Oaks, CA: Sage.

Alvesson, M. & Willmott, H. (2011c). Critical management studies, Volume 3: Specialisms of management. Thousand Oaks, CA: Sage.

Alvesson, M. & Willmott, H. (2011d). Critical management studies, Volume 4: Established and emergent themes. Thousand Oaks, CA: Sage.

Baritz, L. (1960). The servants of power: a history of the use of social science in American industry. Middletown, CT: Wesleyan University Press.

Becker, H. (1998). Tricks of the trade. Chicago, IL: The University of Chicago Press.

Belaval, Y. (1969). Vico and anti-Cartesianism. In G. Tagliacozzo & H. White's (Eds.) Gambattista Vico: An international symposium (pp. 77-91). Baltimore, MD: The Johns Hopkins Press.

Berlin, I. (1976). Vico and Herder: Two studies in the history of ideas, London, UK: The Hogarth Press.

Brief, A. (2000). Still servants of power. Journal of Management Inquiry, 9(4): 342-351. Casey, C. (1995). Work, self and society: After industrialism. London, UK: Routledge.

Comte, A. (1854) System de politique positive, Vol. IV. Paris, France: Mathias.

Cox, J. W., Letrent-Jones, T. G., Voronov, M., & Weir, D. (2009) (Eds.), Critical management studies at work. Northampton, MA: Edward Elgar Publishing.

Critchley, S. (2001). Continental philosophy. New York, NY: Oxford.

Descartes, R. (1641). Meditations on first philosophy. Cambridge, UK: Cambridge University Press.

Dilthey, W. (1961). Meaning in history: W. Dilthey's thoughts on history and society. H. P. Rickman (Ed.). London: George Allen & Unwin, Ltd.

Elmes, M. B., & Costello, M. (1992). Mystification and social drama: The hidden side of communication skills training. Human Relations, 45, 427-445.

Eisenhardt, K. (1989). Building theories from case study research. Academy of Management Review, 14, 532-550.

Fleming, P. (2005). Workers' playtime? Boundaries and cynicism in a "culture of fun" program. Journal of Applied Behavioral Science, 41(3), 285-303.

Fleming, P. (2009). Authenticity and the cultural politics of work. New York: Oxford Press.

Foucault, M. (1980). Power/Knowledge: Selected Writings and Other Interviews 1972-1977. (Ed). C. Gordon. New York: Pantheon.

Gelade, G. A. (2006). But what does it mean in practice? The Journal of Occupational and Organizational Psychology from a practitioner perspective. Journal of Occupational and Organizational Psychology, 79, 153 - 160.

Geertz, C. (1995). After the fact: Two countries, four decades, one anthropologist. Cambridge: Harvard University Press.

Gerard, N. M. (2014a). Searching for capitalism. The Industrial-Organizational Psychologist, 51(3), 85-86.

Gerard, N. M. (2014b). Confronting the real identity crisis. The Industrial-Organizational Psychologist, 51(4), 40-43.

Gergen, K. J. (1973). Social psychology as history. Journal of Personality and Social Psychology, 26, 309-320.

Giddens, A. (1974). (Ed.). Positivism and sociology. London: Heinemann Educational Books, Ltd.

Giorgi, A. (1970). Psychology as a human science. New York: Harper & Row.

Grant, D., & Hardy, C. (2004). Struggles with Organizational Discourse. Organization Studies, 25, 5-13.

Gregg, M. (2011). Work's Intimacies. Malden, MA: Polity.

Grey, C., & Willmott, H. (2005). Critical management studies: A reader. New York: Oxford University Press.

Hahnel, R. (2016). Participatory Economics in the Next System. Report downloaded from thenextsytem.org on 5.20.16.

Hardy, C., Palmer, I. and Phillips, N. (2000), "Discourse as a strategic resource", Human Relations, 53(9), 1227-1248.

Hayek, F. A. (1980). The counter-revolution of science. London: Collier-Macmillan.

Hegel, G. (1807). Phenomenology of spirit. Bloomington, IN: Indiana University Press.

Hochschild, A. (1983). The Managed heart: The commercialization of human feeling. Berkeley: The University of California Press.

Hodgkinson, G. P. (2006). The role of JOOP (and other scientific journals) in bridging the practitioner-researcher divide in industrial, work and organizational (IWO) psychology. Journal of Occupational and Organizational Psychology, 79, 173-178.

Kant, E. (1781). Critique of pure reason. Oxford: Clarendon Press.

Kant, E. (1788). Critique of practical reason. New York: Macmillan.

Kant, E. (1790). Critique of judgment. New York: Macmillan.

Kincheloe, J. L., & McLaren, P. L. (1994). Rethinking critical theory and qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.) Handbook of qualitative research. Thousand Oaks: Sage. 138-157.

Kunda, G. (1992). Engineering culture: Control and commitment in a high-tech corporation. Philadelphia: Temple University Press.

Lefkowitz, J. (1990). The scientist-practitioner model is not enough. The Industrial-Organizational Psychologist, 28, 47–52.

Lefkowitz, J. (2003). Ethics and values in industrial-organizational psychology. Mahwah, NJ: Lawrence Erlbaum Associates.

Lefkowitz, J. (2016). The maturation of a profession: a work psychology for the new millennium. In McWha-Hermann, Maynard, & Berry (Eds.), Humanitarian work psychology and the global development agenda: Case studies and interventions. New York: Routledge.

Locke, E. (1978). "Job satisfaction reconsidered"—reconsidered. American Psychologist, 33(9), 854-855.

Locke, K., & Golden-Biddle, K. (2002). An introduction to qualitative research: Its potential for industrial and organizational psychology. In Rogelberg (Ed.), Handbook of Research Methods in Industrial and Organizational Psychology. Malden, MA: Blackwell.

Madison, D. S. (2012). Critical ethnography (2nd ed.). Thousand Oaks, CA: Sage.

Malin, V., Murphy, J., & Siltaoja, M. (2013). Getting things done: Practice in critical management studies. Bingley, UK: Emerald Group Publishing.

Marx, K. (1845). Theses on Feuerbach. Amherst, NY: Prometheus Books.

McWha-Hermann, I., Maynard, D., & Berry, M. (Eds.). (2016). Humanitarian work psychology and the global development agenda: Case studies and interventions. New York: Routledge.

Messer, S. B., Sass, L. A., & Woolfolk, R. L. (1988). (Eds.), Hermeneutics and psychological theory. New Brunswick, NJ: Rutgers University Press.

Mills, C. W. (1948). The contribution of sociology to the studies of industrial relations. Berkeley Journal of Sociology, 15, 11-32.

Millward, L. J. (2006). The transition to motherhood in an organizational context: An interpretative phenomenological analysis. Journal of Occupational and Organizational Psychology, 79(3), 315-333.

Nord, W. (1974). The failure of current applied behavioral science – a Marxian perspective. Journal of Applied Behavioral Science, 10(4), 557-578.

Nord, W. (1977). Job satisfaction reconsidered. American Psychologist, 32(12), 1026-1035.

Nord, W. (1978). On Locke's "revision" of "job satisfaction reconsidered." American Psychologist, 33(9), 855-857.

Orlikowski, W., & Baroudi, J. (1991). Studying information technology in organizations: Research approaches and assumptions. Information Systems Research, 2(1), 1-28.

Parker, I., & Shotter, J. (Eds.) (1990) Deconstructing social psychology. London: Routledge.

Popper, K. (1934). The logic of scientific discovery. New York, NY: Routledge.

Potter, J. (1996). Representing reality: Discourse, rhetoric and social construction. Thousand Oaks, CA: Sage.

Potter, J., & Wetherell, M. (1987). Discourse and social psychology: Beyond attitudes and behaviour. Thousand Oaks, CA: Sage.

Prasad, A., Prasad, P., Mills, A., & Mills, J. (2016). The Routledge companion to critical management studies. New York, NY: Routledge.

Putnam, H. (1990). Renewing philosophy. Cambridge, MA: Harvard University Press.

Rosen, M., & Astley, W. G. (1988). Christmas time and control: An exploration in the social structure of formal organizations. Research in the Sociology of Organizations, 6, 159-82.

Silzer, R., Cober, R., Erickson, A., & Robinson, G. (2008). Practice perspectives: Practitioner satisfaction with SIOP. The Industrial-Organizational Psychologist, 46(1). Retrieved from http://www.siop.org/tip/July08/08silzer.aspx

SIOP (2015). What is I-O? Retrieved from www.siop.org.

Steffy, B. D., & Grimes, A. J. (1992). Personnel/organizational psychology: A critique of the discipline. In M. Alvesson & H. Willmott (Eds.), Critical management studies (pp. 181-201). Thousand Oaks, CA: Sage.

Sullivan, E. V. (1984). A critical psychology. New York, NY: Plenum Press.

Symon, G., & Cassell, C. (2006). Neglected perspectives in work and organizational psychology. Journal of Occupational and Organizational Psychology, 79, 307-314.

Tadajewski, M., Maclaran, P., Parsons, E., & Parker, M. (2011). Key concepts in critical management studies. Thousand Oaks, CA: Sage.

van Maanen, J. V. (1992). The smile factory: Work at Disneyland. In Frost, P. J., Moore, L. F., Louis, M. L., Lundberg, C. C. and Martin, J. (Eds.) Reframing organizational culture (pp. 58-76). London: Sage.

Vico, G. (1725). New science. Ithaca, NY: Cornell University Press.

Veldsman, T. H. (1990). Fish without water? Philosophy as study of the water within which industrial/organizational psychologists swim. Human Relations, 43, 349-368.

Voronov, M., Cox, J. W., LeTrent-Jones, T. G., & Weir, D. (2009). Introduction: Intersections of critical management research and practice. In J. W. Cox, T. G. Letrent-Jones, M. Voronov, & D. Weir (Eds.), Critical management studies at work. Northampton, MA: Edward Elgar Publishing. 1-11.

Wall, T. (2006). Is JOOP of only academic interest? Journal of Occupational and Organizational Psychology, 79, 161 - 165.

Weick, K. E. (1979). The social psychology of organizing. Reading, MA: Addison-Wesley.

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A publication Scholarly Traditions and the Gig Economy: Reply to Gerard Ychology, Inc.

Richard A. Guzzo Mercer, Workforce Sciences Institute

Gerard (2016) presents a case for the value of the critical scholarly tradition to work psychology. The term "the scholarly tradition" is essential. It denotes that the approach is more about a philosophical orientation than, say, a highly prescribed set of methods of scientific inquiry and it denotes that several theoretical variations are subsumed under that label. Critical theory applied to understanding works of art, for example, rests on different foundations than critical theory applied to organizations, but both bring in social, political, and cultural backgrounds to interpretations. But how applicable is critical theory to the psychology of work?

Stimulated by the article I searched for a way of assessing the "value added" by the critical tradition to that given by the positivist and interpretative approaches, the two alternatives better known to me. Needing a work-related context not yet overfished, I settled on a comparative analysis of the three perspectives applied to the gig economy. But, first, what is the gig economy?

The Gig Economy Defined

"There is no officially accepted definition of the 'gig economy' – or, for that matter, a gig" (Torpey and Hogan, 2016). For present purposes, Torpey and Hogan's definition suffices: "A gig describes a single project or task for which a worker is hired, often through a digital marketplace, to work on demand." Gigs can be extremely brief—think of engaging in an online gaming session for pay—or can have substantial durations, such as a contracted consulting assignment. It is difficult to say with precision how big the gig economy is in terms of revenue or numbers of workers. For some people gig work is their single source of earnings. Of the over 150 million people in the US workforce, 6.2%, or over 9 million, are self-employed (Bureau of Labor Statistics, 2016). But not all who are self-employed are gig workers; many may do a gig in addition to holding traditional employment. Torpey and Hogan (2016) suggest that a better assessment of the gig economy comes from data on nonemployers. A nonemployer is defined as an unincorporated business with no paid employees that has receipts of least \$1,000 and is subject to federal income taxes. Based on data that originate from US tax returns, the Census Bureau estimates that over 23 million US taxpayers work as nonemployers (Census Bureau, 2016). Of these, about 40% report gross annual receipts of under \$10,000 suggesting that, for many, nonemployer work - perhaps gig work - supplements other sources of income. Although it is challenging to be precise about parameters like the size of the gig economy in dollars or the centrality of gigs to individuals' working lives, it is clear that gig work is "big enough" to warrant the attention of psychological research.

Gig Work and the Three Scholarly Traditions

The Positivist Tradition. Of the three, the positivist tradition has the largest body of theory and the greatest number of ready-to-go issues to address in a gig world. Peruse the table of contents of I-O psychology textbooks and many of the chapter titles immediately suggest the relevance of this approach. For example, the long history of selection research provides a relevant base, although the self-selection into gig work is more relevant than research on business enterprises' processes for optimally choosing which applicants to take on as employees. Motivation research and theory offers a wealth of ideas applicable to gig work, such as theories of self-regulation during task performance and theories of the motivational consequences of autonomy while working. However, several theoretical domains rooted in this tradition lose relevance in a nonemployer context, such as theories of leadership and of careers defined with regard to the rungs of organizational hierarchies. Tools familiar to this approach easily apply to the study of gig work, such as structured surveys, experiments, and quasi-experiments. Perhaps one of the challenges of the approach is securing sufficient sample sizes for quantitative analyses: Getting large numbers of gig workers to participate in a research study may not be as easy as when relying on a captive employee population. Perhaps, though, access to large numbers of gig workers may be feasible by collaborating with one or more of the many operators of digital marketplaces for gig work (e.g., elance.com, flexjobs.com, ratracerebellion.com, backdoorjobs.com and others). Overall, the empirical-analytic approach ("positivist") has plenty to offer to the study of the gig economy, although the gig economy narrows its roster of relevant topics.

The Interpretive Tradition. The interpretive tradition's essential concern is meaning—making—that is, how an actor understands the world in which he or she is embedded and how

that understanding influences affect and action. The process of making meaning can be personalistic or social, the latter resulting in shared interpretations within a group or other social entity. The interpretive tradition appears to be an apt fit as a method of research into gig work, and there is surely great variety in the meanings that gig workers attach to what they do. Some may construe gig work as unwanted but necessary interim activities that fill the time between the previous and the next period of traditional employment. Others may find gig work an affirmation of their independence and personal sovereignty. Yet others may see gig work as an experiment on a journey self-discovery or a pleasant distraction from a mundane 9 to 5 job. Interpretive research methods such as in-depth interviews, diary keeping, and periodic sampling of affect and activities would seem to be very suitable approaches to learning about the various ways that gig workers make sense of what they do and how those interpretations influence gig work behavior, such as work quality, enjoyment, and longevity as a gig worker.

The Critical Tradition. This intellectual tradition emphasizes the broader social and cultural context in which individuals and their behaviors are embedded. In particular, as Gerard (2016) describes, the critical approach often focuses on asymmetric power relationships and their consequences. Consider this scenario with regard to the work of housecleaning. If there is variability in the demand for such services—that is, the risk exists of no or low revenue for a time—a traditional employer of housekeepers bears the risk and pays wages to its employees during periods of low demand. Under a gig, or contract work arrangement, the service provider shifts the risk to the workers by providing them gigs only when there is demand. Individual housecleaners are, of course, free to accept or reject this risk (accept the risk in return for higher rates, say, or reject it by finding other gigs in lieu of housecleaning). The simplicity of this scenario, however, often understates reality. Handy, a provider of housecleaning gigs, incurred a class action suit filed by some of its former contract workers because, they claimed, Handy did more than just provide gigs: They acted as an employer by providing "guidance" for at-work behavior that were construed as rules and by subjecting the workers to practices that were, in essence, those of an employer (Kessler, 2015). In 2015, 17 of the 50 lawsuits filed in federal courts against Uber were by employees, often on the grounds that Uber went beyond just providing gig opportunities and instead acted like an employer but without the obligations required of employers (Brown, 2016). These appeals to third parties—the court—to redress perceived mistreatment made possible by power asymmetries are unambiguous signs that the critical tradition with its emphasis on asymmetrical power has is relevant to the gig economy. The critical tradition appears to be an easy complement to the interpretive tradition as awareness of broader social forces operating in the gig economy can influence how individuals make sense of their own place in it. However, the applicability of the critical scholarly tradition has limits. It is most germane when gig work is intermediated, for example, as in the Uber and Handy illustrations, but it is less relevant to other regions of the gig universe where the exchange between worker and consumer are directly governed by the free choices of each party.

Concluding Thoughts

As a yet-to-be-thoroughly-researched domain, gig work offers an arena in which to assess the relative applicability of different scholarly traditions, notably the critical tradition. Alt-

hough each of the three traditions described by Gerard (2016) has limitations, each is applicable to that context and, therefore, yes the critical scholarly tradition adds unique value, supporting Gerard's (2016) case.

This exploration of the gig economy, however, leads me to another conclusion at odds with Gerard. Gerard represents the critical tradition as an outsider banging on the front door of the house of I-O psychology demanding to be let in. This is evident by the repeated use of the word "new" to present the case for it and the description of critical management studies as "yet to penetrate" the discipline. It is also evident in how Gerard presents the positivist approach: with a heavy emphasis on historical origins but with little attention to how it has evolved to something closer to an "empirical analysis" approach as some of the older philosophy-of-science principles have been shed. My view is that the critical scholarly tradition already is in the house. Matters of asymmetrical power and how it plays out in organizations have long been a concern of researchers in the profession of I-O psychology. Further, the discipline's involvement in ensuring fairness in hiring, pay, and other organizational practices can be construed as righting unwanted wrongs made possible because organizations operate within a larger social order characterized by significant imbalances of power. Perhaps I-O psychology needs to open the closet door, not the front door, to take more explicit advantage of what the critical scholarly tradition can offer.

References

- Brown, K. V. (2016). Uber is facing a staggering number of lawsuits. *Fusion*. Retrieved from http://fusion.net/story/257423/everyone-is-suing-uber/
- Bureau of Labor Statistics. (2016). Occupational Employment Statistics. Retrieved from http://www.bls.gov/oes/
- Census Bureau. (2016). 2014 nonemployer statistics. Retrieved from http://censtats.census.gov/cgi-bin/nonemployer/nonsect.pl
- Gerard, N. (2016). Toward a critical I-O psychology. *The Industrial-Organizational Psychologist*, 54(1). Available at http://www.siop.org/tip/oct16/gerard.aspx.
- Kessler, S. (2015). The gig economy won't last because it's being sued to death. *Fast Company*. Retrieved from https://www.fastcompany.com/3042248/the-gig-economy-wont-last-because-its-being-sued-to-death
- Torpey, E., & Hogan, A. (2016). Working in a gig economy. Retrieved from http://www.bls.gov/careeroutlook/2016/article/what-is-the-gig-economy.htm

I-O Psychology's Lack of Research Integrity

Sheila K. List & Michael A. McDaniel Virginia Commonwealth University

In recent years, the integrity of our scientific research has been called into question by the popular press who has asked if the scientific method is flawed (Lehrer, 2010). This assertion has been examined by many researchers as well (e.g., Bedeian, Taylor, & Miller, 2010; Kepes & McDaniel, 2013; O'Boyle, Banks, & Gonzalez-Mulé, in press). These authors have argued that the current states of I-O psychology and management are flawed for several reasons. First, the theory fetish (Hambrick, 2007) in our field is making it nearly impossible to publish null results or replications, which has prevented us from developing solid theory (Cucina & McDaniel, 2016). Second, for academics, the necessity to publish for tenure, retention, promotion, raises, and so on encourages researchers to engage in questionable research practices (QRPs) if the obtained results do not align with a priori expectations or do not reach statistical significance (e.g., Banks, Rogelberg, Woznyj, Landis, & Rupp, 2016; O'Boyle et al.).

A recent article in *The Industrial-Organizational Psychologist* by Nicklin, Gibson, and Grand (2016) touched briefly on the prevalence and impact of QRPs on scientific research in its description of two separate panel discussions conducted at the annual conference for the Society for Industrial-Organizational Psychology (SIOP). This article responds to their call to continue the conversation and aims to extend their discussion by reviewing three common QRPs, discussing their prevalence, and outlining the ways in which they undermine our field, and science as a whole. We then discuss several ways which we as a field, and as individual researchers, may discourage QRPs, encourage transparency, and increase the integrity of our results.

What Are QRPs?

QRPs are practices pertaining to analysis of data and reporting of results that may make the results of a study seem more favorable and have the potential to mislead consumers of the research (Banks, Rogelberg et al., 2016). QRPs include such practices as removing or adding data after testing hypotheses, adding or removing control variables after hypothesis testing, and altering, adding, or removing hypotheses after testing. Although each of these practices may be used to intentionally provide misleading results, it is also possible for authors to engage in these practices for less insidious reasons. Consider this situation. A researcher drops data from two participants who were identified as outliers, leading to a statistically significant result not previously observed, which could be viewed as inappropriate. However, if the researcher describes the process by which the data were identified as outliers and states that the two cases were dropped, most researchers would not consider the practice unethical. Thus, determining what is a QRP and what is not is, at least partially, a question of transparency (Fanelli, 2013).

Several authors have proposed taxonomies of QRPs including Banks, Rogelberg et al. (2016) and O'Boyle et al. (in press). Ultimately, however, most QRPs can be considered as some form of HARKing (hypothesizing after results are known; Kerr, 1998), selective reporting, or p-hacking.

Kerr defined HARKing as presenting post-hoc hypotheses as a priori hypotheses. Kerr outlined some initial evidence indicating that HARKing may be widespread in the field of psychology. More recent evidence has also demonstrated the very common prevalence of HARKing. For instance, Bedeian et al. (2010) found that 91.9% of the 384 faculty surveyed stated that they had knowledge of faculty engaging in HARKing within the past year. Other estimates have suggested that between approximately 27% and 90% of researchers have engaged in HARKing, or know of another faculty member who has (John, Loewenstein, & Prelec, 2012).

Selective reporting occurs at both the hypothesis level and the study level. For instance, if a researcher conducted a study in which half of the hypotheses were not supported by the data, the researcher may choose to report only the hypotheses that were supported. Alternatively, if a researcher conducts a study where none of the central hypotheses are reported, that researcher may abandon the entire study and not submit it to a journal. Approximately 46% to 50% of researchers surveyed admitted to selectively reporting hypotheses (John et al., 2012). Furthermore, Bedeian et al. (2010) found that approximately 50% of faculty members surveyed stated that they knew someone who had withheld data that contradicted a previous finding (another motivation for selective reporting). Many would find it a reasonable inference that self-reports of such practices substantially underestimate the frequency of occurrence.

In addition to self-report survey evidence regarding the prevalence of HARKing and selective reporting, researchers have also examined the way in which hypotheses change from dissertations and conference papers to published articles (e.g., Banks, O'Boyle, White, & Batchelor, 2013; Mazzola & Deuling, 2013; O'Boyle et al., in press). These researchers have found that the number of hypotheses supported in journal articles is significantly greater than those supported in dissertations and conference papers. This suggests that the authors of these papers are engaging in selective reporting and/or HARKing and that these practices are common.

In addition to HARKing and selective reporting, the examination of the instances and results of p-hacking has also increased (e.g., Field, Baker, Bosco, McDaniel, & Kepes, 2016). P-hacking is a broader category of QRPs that includes any practice that a researcher uses to turn a nonstatistically result into a statistically significant one. This can include collecting data until significance is achieved, ceasing the collection of data once significance is achieved, and adding or deleting control variables based on which variables result in a significant relation (Head, Holman, Lanfear, Kahn, & Jennions, 2015). Evidence based on the expected probability of *p* values of less than .05 has shown that p-hacking is common across many disciplines, including psychology (e.g., Head et al.; Masicampo & Lalande, 2012). Furthermore, survey evidence has demonstrated that approximately 56% or more of researchers have either admitted continuing to collect data after testing their hypotheses or know of a researcher who has done so (John et al., 2012). Furthermore, 22-23% of researchers admitted to a different form of p-hacking, rounding down *p*-values to .05 when they are, in fact, greater that .05 (e.g., .054; John et al. 2012).

Do QRPs Matter?

As outlined above, research has shown that many QRPs occur frequently. However, is it possible that they do not hurt the scientific process? The mission of many research universities involves the creation and dissemination of knowledge; however, if the research in our field is judged to be untrustworthy, we may ultimately be failing at these endeavors. In regard to the creation of knowledge, the prevalence of QRPs makes it difficult to sort out the true relations between variables. Kepes and McDaniel (2013) discussed how problems in the publication and reporting process, including QRPs, distort scientific knowledge through their impact on metaanalyses. For example, the selective reporting of hypotheses and lack of outlets for null results may lead to over-inflated meta-analytic correlations. Given that meta-analyses synthesize the results of several primary studies to examine the extent to which hypotheses are supported, they are generally more accurate than any one primary study. However, their accuracy is damaged by publication bias, which is the extent that the studies included in a meta-analysis are not representative of all studies conducted that evaluate the relation of interest (Banks, Kepes, & McDaniel, 2012; Kepes & McDaniel, 2015; Rothstein, Sutton, & Borenstein, 2005). Ferguson and Brannick (2012) found that approximately 40% of meta-analyses in psychology are affected by publication bias, and approximately 25% of meta-analyses have a worrisome degree of publication bias. Evidence suggests that in the social sciences, the main contributor to publication bias is the selective reporting of hypotheses and the suppression of null findings (Franco, Malhotra, & Simonovits, 2014). Recent reexaminations of well-established meta-analytic correlations have found that these relations may be overestimated (e.g., Kepes & McDaniel, 2015; Renkewitz, Fuchs, & Fiedler, 2011).

In addition to the effect of publication bias, HARKing has also been shown to impact the effect sizes through inflation. Bosco, Aguinis, Field, Pierce, and Dalton (2015) compared cumulative effect sizes from articles that explicitly hypothesized relations to cumulative effect sizes from articles whose relations were included but not explicitly hypothesized (i.e., the relation could be determined through examining the correlation table, but there was not a specific hypothesis about the relation between the variables in the article). They found that the effect sizes from studies with hypothesized relations were significantly larger than those where there was not a hypothesis. One could infer that when relations have smaller effect sizes, or are not statistically significant, the authors engage in HARKing so as to have fewer unsupported hypotheses (Bosco et al.). The influence of p-hacking has also been examined. However, the evidence regarding whether or not it affects the quality of scientific findings is mixed. Head et al. (2015) found that p-hacking did not significantly impact the quality of meta-analytic evidence, whereas other researchers purport that the prevalence of p-hacking suggests that most of the published research findings are inaccurate (loannidis, 2005).

In regards to the dissemination of knowledge, QRPs harm the reputation of science for the lay population. As Bedeian et al. (2010) discussed, researchers who engage in, or even appear to engage in, QRPs that flout the basic tenets of science make it harder for lay individuals to take scientific findings seriously. If scientific research is untrustworthy, then the ability to disseminate useful knowledge is diluted. Furthermore, the untrustworthiness of research makes it difficult to practice evidence-based management (Kepes, Bennett, & McDaniel, 2014), as we cannot be confident in the accuracy of the evidence. Last, for those psychologists who train graduate

students, it is easy to forget that graduate students not only learn through coursework and conducting their own research, but they also learn by observing how their mentors conduct research. These lessons can be conflicting. Banks, Rogelberg et al. (2016) found that graduate students reported receiving instructions to avoid engaging in QRPs but also frequently observed them. These behaviors become habit. Graduate students learn that although in a perfect world, QRPs should be avoided; in practice, most everyone engages in them. In fact, the "publish or perish" mantra, coupled with the research findings that number of top-tier publications is the main predictor of salary (Gomez-Mejia & Balkin, 1992), socializes graduate students that it is acceptable to engage in QRPs because that is how they were trained and how they will be incentivized.

Thus, ultimately QRPs matter for three main reasons: QRPs undermine our cumulative knowledge, damage our integrity, and provide a poor example for future researchers. Therefore, QRPs are a stain on our field, regardless of whether the individuals engaging in them have mal-intent or not.

How Can We Promote Research Integrity?

Several different researchers have offered recommendations aimed at reducing the frequency of QRPs and increasing the integrity of our research (e.g., Banks, O'Boyle et al., 2016; Banks, Rogelberg et al., 2016; Kepes et al., 2014; Kepes et al., 2013; O'Boyle et al., in press). These recommendations include clarifying what is considered acceptable and what is considered unacceptable, encouraging the publication of exploratory studies, replications, and null findings, and changing the review process. Although each of these are useful suggestions that we feel should be implemented, we focus here specifically on what individual researchers can do to improve the integrity of their studies.

First, we concur with Nicklin et al. (2016) and many other authors that researchers should emphasize transparency. This means not only conforming to the Journal Articles Reporting Standards (JARS) of the American Psychological Association (APA, 2008) and the Meta-Analytic Reporting Standards (MARS; APA, 2008) by making a concerted effort to write clearly and include all relevant information in journal articles but also sharing data and any code or syntax used to analyze data. Data and syntax can be made available through the Open Science Framework (http://osf.io) and included in supplemental article materials maintained by most journals. Ultimately this critical appraisal of research improves the confidence that we can have in the results by allowing other researchers to reanalyze data using different techniques and confirm findings, making the findings more impactful (Baker, Bosco, Uggerslev, & Steel, 2016). Furthermore, this critical appraisal process encourages continued professional development among researchers.

Second, researchers should perform and report sensitivity analyses on their results to determine the robustness of their conclusions. Sensitivity analyses provide supplementary evidence that allow more confidence to be placed in the results of a study. For example, authors can analyze data using different controls, different measures or operationalizations of the variables of

interest, different analytical methods, and so forth. Including these checks ensures that the effects observed in the study is not just a function of the particular combination of variables and measures, or the data analysis technique employed, but rather is a reflection of the true underlying effect. Reporting the sensitivity analyses enhances the transparency of the research and credibility of the conclusions. This is hardly ever done in I-O psychology.

Researchers conducting meta-analyses should also be sure to conduct sensitivity analyses. In the meta-analytic context, sensitivity analyses include the assessment of publication bias and outlier analysis. Examining the extent to which publication bias impacts meta-analytic correlations is extremely important given the prevalence assessment of publication bias completed by Ferguson and Brannick (2012). However, Banks, Kepes, and McDaniel (2012) found that only 31% of meta-analyses published in top management and I-O psychology journals empirically assessed the presence of publication bias. Furthermore, many of the articles that did include an assessment of publication bias used inappropriate methods (Banks et al., 2012). In regards to outliers, despite the knowledge that outliers can impact meta-analytic conclusions, only about 3% of meta-analytic studies include an assessment of outliers (Aguinis, Dalton, Bosco, Pierce, & Dalton, 2011).

There are more than 10 different methods to assess publication bias, which are each affected differently by different factors (e.g., number of studies included, degree of heterogeneity present, assumptions of symmetry). There are also multiple methods for outlier detection (Viechtbauer & Cheung, 2010). Currently, there is no accepted standard regarding which method is the best to use in every scenario; thus, it is important to employ multiple methods and take a triangulation approach. Using multiple methods will allow meta-analysts to estimate the mean correlation more accurately (Kepes, Banks, McDaniel, & Whetzel, 2012; Kepes & McDaniel, 2015).

Nicklin et al.'s (2016) review of topics discussed at the annual SIOP conference provided a jumping off point for our review. Clearly, these issues present challenges that we must face and tackle in order to continually improve as a field. It is encouraging to know that we as a field are engaging in meaningful conversations aimed at arising to these challenges. Yet, although it is important to discuss the importance of research integrity and how it can be improved upon, it is essential that we do more than talk. It is time to put recommendations mentioned Nicklin et al. (2016), Banks, Rogelberg et al. (2016), Kepes et al. (2013), O'Boyle et al. (in press), and by many other authors, into practice. The QRP research in I-O psychology is at the crossroads (Johnson, 1936). Research and the popular press has addressed the prevalence of QRPs which undermine the trustworthiness of our findings and our integrity as researchers. Now, we as a field must determine what to do with this knowledge. Do we wish to be known as untrustworthy researchers, or as scholars who promote the advancement of science through adherence to practices consistent with research integrity? Time will tell.

References

Aguinis, H., Dalton, D. R., Bosco, F. A., Pierce, C. A., & Dalton, C. M. (2011). Meta-analytic choices and judgment calls: Implications for theory building and testing, obtained effect sizes, and scholarly impact. *Journal of Management*, *37*, 5-38. doi: 10.1177/0149206310377113

- American Psychological Association (2008). Reporting standards for research in psychology: Why do we need them? What might they be? *American Psychologist*, *63*, 839-851. doi: 10.1037/0003-066X.63.9.839
- Baker, C. A., Bosco, F. A., Uggerslev, K. L., & Steel, P. G. (2016). metaBUS: An open search engine of I-O research findings. *The Industrial-Organizational Psychologist*
- Banks, G. C., Kepes, S., & McDaniel, M. A. (2012). Publication bias: A call for improved meta-analytic practice in the organizational sciences. *International Journal of Selection and Assessment*, 20, 182-196. doi:10.1111/j.1468-2389.2012.00591.x
- Banks, G. C., O'Boyle, E. H., Pollack, J. M., White, C. D., Batchelor, J. H., Whelpley, C. E., . . . Adkins, C. L. (2016). Questions about questionable research practices in the field of management: A guest commentary. *Journal of Management, 42*, 5-20. doi: 10.1177/0149206315619011
- Banks, G. C., O'Boyle, E. H., White, C. D., & Batchelor, J. H. (2013). *Tracking SMA papers to journal publication: An investigation into the phases of dissemination bias*. Paper presented at the 2013 annual meeting of the Southern Management Association, New Orleans, LA.
- Banks, G. C., Rogelberg, S. G., Woznyj, H. M., Landis, R. S., & Rupp, D. E. (2016). Editorial: Evidence on questionable research practices: The good, the bad, and the ugly. *Journal of Business and Psychology*, 1-16. doi: 10.1007/s10869-016-9456-7
- Bedeian, A. G., Taylor, S. G., & Miller, A. N. (2010). Management science on the credibility bubble: Cardinal sins and various misdemeanors. *Academy of Management Learning & Education*, *9*, 715-725. doi: 10.5465/amle.2010.56659889
- Bosco, F. A., Aguinis, H., Field, J. G., Pierce, C. A., & Dalton, D. R. (2016), HARKing's threat to organizational research: Evidence from primary and meta-analytic sources. *Personnel Psychology*, 69, 709–750. doi:10.1111/peps.12111
- Cucina, J.M., & McDaniel, M. A. (2016). Pseudotheory proliferation is damaging the organizational sciences. *Journal of Organizational Behavior*. doi: 10.1002/job.2117
- Fanelli, D. (2013). Redefine misconduct as distorted reporting. *Nature*, 494, 149. doi: 10.1038/494149a
- Ferguson, C. J., & Brannick, M. T. (2012). Publication bias in psychological science: Prevalence, methods for identifying and controlling, and implications for the use of meta-analyses. *Psychological Methods*, *17*, 120-128. doi: 10.1037/a0024445
- Field, J. G., Baker, C. A., Bosco, F. A., McDaniel, M. A., & Kepes, S. (2016, April). *The extent of p-hacking in I-O psychology*. Paper presented at the 31st Annual Conference of the Society for Industrial and Organizational Psychology, Anaheim, CA.
- Franco, A., Malhotra, N., & Simonovits, G. (2014). Publication bias in the social sciences: Unlocking the file drawer. *Science*, *345*(6203), 1502-1505. doi: 10.1126/science.1255484
- Gomez-Mejia, L. R., & Balkin, D. B. (1992) Determinants of faculty pay: An agency theory perspective. *Academy of Management Journal*, *35*, 921-955. doi: 10.2307/256535
- Hambrick, D. C. (2007). The field of management's devotion to theory: Too much of a good thing? *Academy of Management Journal*, *50*, 1348 –1352
- Head, M. L., Holman, L., Lanfear, R., Kahn, A. T., & Jennions, M. D. (2015). The extent and consequences of p-hacking in science. *PLoS Biology*, *13*, doi: 10.1371/journal.pbio.1002106
- Ioannidis, J. P. A. (2005). Why most published research findings are false. *CHANCE*, *18*(4), 40-47. doi:10.1080/09332480.2005.10722754

- John, L. K., Loewenstein, G., & Prelec, D. (2012). Measuring the prevalence of questionable research practices with incentives for truth telling. *Psychological Science*, 23, 524-532. doi: 10.1177/0956797611430953
- Johnson, R. (1936). *Crossroad Blues*. Brunswick Records: San Antonio. Available at https://www.youtube.com/watch?v=Yd60nI4sa9A
- Kepes, S., Banks, G.C., McDaniel, M.A., & Whetzel, D.L. (2012). Publication bias in the organizational sciences. *Organizational Research Methods*, *15*, 624-662. doi: 10.1177/1094428112452760
- Kepes, S., Bennett, A. A., & McDaniel, M. A. (2014). Evidence-based management and the trust-worthiness of our cumulative scientific knowledge: Implications for teaching, research, and practice. *Academy of Management Learning & Education, 13*, 446-466. doi: 10.5465/amle.2013.0193
- Kepes, S. & McDaniel, M. A. (2013). How trustworthy is the scientific literature in industrial and organizational psychology? *Industrial and Organizational Psychology: Perspectives on Science and Practice*, *6*, 252-268. doi: 10.1111/iops.12045
- Kepes, S. & McDaniel, M. A. (2015). The validity of conscientiousness is overestimated in the prediction of job performance. *PLoS ONE, 10*(10):e0141468. doi: 10.1371/journal.pone.0141468.
- Kerr, N. L. (1998). HARKing: Hypothesizing after the results are known. *Personality and Social Psychology Review, 2,* 196-217. doi: 10.1207/s15327957pspr0203_4
- Lehrer, J. (2010). The truth wears off. The New Yorker, 86, 53-57.
- Masicampo, E. J., & Lalande, D. R. (2012). A peculiar prevalence of *p* values just below.

 05. *Quarterly Journal of Experimental Psychology*, 65: 2271-2279.

 doi: 10.1080/17470218.2012.711335
- Mazzola, J. J., & Deuling, J. K. (2013). Forgetting what we learned as graduate students: HARKing and selective outcome reporting in I-O journal articles. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 6, 279-284. doi: 10.1111/iops.12049
- Nicklin, J. M., Gibson, J. L., & Grand, J. (2016). Cultivation a future of meaningful, impactful, and transparent reesarch. *The Industrial-Organizational Psychologist*
- O'Boyle, E. H., Banks, G. C., & Gonzalez-Mule, E. (in press). The chrysalis effect: How ugly initial results metamorphosize into beautiful articles. *Journal of Management*. doi: 10.1177/0149206314527133
- Renkewitz, F., Fuchs, H. M., & Fiedler, S. (2011). Is there evidence of publication bias in JDM research? *Judgment and Decision Making*, *6*, 870-881.
- Rothstein, H. R., Sutton, A. J., & Borenstein, M. (2005). *Publication bias in meta-analysis: Pre*vention, assessment, and adjustments. West Sussex, UK: Wiley.
- Viechtbauer, W. and Cheung, M. W. L. (2010). Outlier and influence diagnostics for meta-analysis. *Research Synthesis Methods*, *1*, 112-125.

Expected Utility of Interest Inventories in Employee Selection: Perceptions of Industrial-Organizational Psychology Experts1

Amy J. Mandelke,2 Elizabeth L. Shoenfelt, and Reagan D. Brown Western Kentucky University

Abstract

Interest inventories have long been used in conjunction with assessments of other constructs to understand career exploration and career choice. Recently, a number of researchers have called for increased utilization of interest inventories in personnel decision making, yet this call has received limited attention in Industrial-Organizational (I-O) psychology. I-O psy-chologists with expertise in employee selection and/or EEO law were surveyed. I-O experts in-dicated interest inventories may have incremental validity over traditional selection instru-ments and that interest inventories are unlikely to result in employer liability; experts identified potential uses of interest inventories in I-O applications other than selection. However, experts perceived interest inventories to have limited expected utility for personnel selection. That these latter perceptions are inconsistent with recent meta-analytic evidence supporting inter-ests as predictors of important individual and organizational outcomes indicates the need to educate I-O psychologists on the utility of interests in employee selection.

Industrial-organizational (I-O) psychologists use a variety of selection instruments to help ensure optimal fit of individuals to their jobs. Recently, researchers have called for in-creased utilization of interest inventories in personnel decision making (Chope, 2011; Nye, Su, Rounds, & Drasgow, 2012; Rounds & Su, 2014; Van Iddekinge, Roth, Putka, & Lanivich, 2011). Despite recent meta-analytic evidence that interest inventories are valid predictors of job per-formance, training performance, turnover intentions, and turnover (Nye et al., 2012; Van Id-dekinge, Roth et al., 2011), and despite some evidence that interests have incremental validity over traditional cognitive and personality measures for these same criteria (Van Iddekinge, Putka, & Campbell, 2011), interest inventories have received limited attention in I-O psychology for selection purposes (Nye et al., 2012; Van Iddekinge, Putka et al., 2011; Van Iddekinge, Roth et al., 2011).3 Our study assessed perceptions of I-O psychologists with expertise in employee selection of the utility of standardized interest inventories in employee selection. Our results make a case for increased use of interest inventories in selection contexts.

Interest inventories have long been used in conjunction with assessments measuring other constructs (e.g., aptitude, abilities, motivation, values, and personality) to understand ca-reer exploration and career choice (e.g., Betz & Borgen, 2000; Cole & Hanson, 1974). It is theo-rized that a combination of constructs enables a more comprehensive understanding of an indi-vidual that can then be used to better predict desirable outcomes (e.g., job performance, reten-tion, etc.; Betz & Borgen, 2000; Cates, 1999). Because, relative to other predictors, interest in-ventories have received little attention in I-O psychology, our first objective was to assess gen-eral awareness and knowledge of interest inventories among I-O psychologists.

Rationale for Utilizing Interest Inventories in Selection

Numerous linkages between vocational interests and various outcomes have been supported in fields outside of I-O (e.g., career counseling, vocational behavior; Ehrhart & Makransky, 2007; Harrington, 2006; Harrington & Long, 2013; Mount & Muchinsky, 1978). Predictive relationships, such as interest inventories with academic performance (Mikulak, 2012; Nye et al., 2012) and job choice (Harrington, 2006), have been empirically supported in career coun-seling. Other relationships, such as between interest inventories and job satisfaction (i.e., over-all satisfaction; satisfaction with work, pay, promotions, supervision, and coworkers) and per-son—environment fit (Ehrhart & Makransky, 2007; Mount & Muchinsky, 1978; Spokane, Meir, & Catalano, 2000), have been supported in other related fields (e.g., vocational behavior). Con-gruent employees (i.e., employees with agreement between their interests and their position occupational codes) are more satisfied than incongruent employees (Mount & Muchinsky, 1978). Vocational interests are more predictive of perceived person—vocation fit and person—job fit than is personality (Ehrhart & Makransky, 2007).

There was limited early empirical support for the use of interest inventories in I-O psy-chology (e.g., Blau, 1987). However, two recent meta-analyses indicated empirical support for interest inventories as predictors of important individual and organizational outcomes. Nye et al. (2012) found correlations across a variety of interest scales and study characteristics that range from .21 to .30 with performance, .21 to .34 with persistence, and .26 to .37 with organi-zational citizenship behavior. Van Iddekinge, Roth et al. (2011) found correlations of .14 with performance, .26 with training performance, -.19 with turnover intentions, and -.15 with actual turnover. Other relationships have been hypothesized, including the relationships between in-terest inventories and personality assessments administered within a work context frame of reference (Hunthausen, Truxillo, Bauer, & Hammer, 2003) or interests with noncognitive con-structs such as motivation and core self-evaluations (Rounds & Su, 2014; Van Iddekinge, Roth et al., 2011).

Person–environment fit. Person–environment (PE) fit is based on the ideology of con-gruence (i.e., similarity and compatibility) between the characteristics of the person and the characteristics of his/her work environment (Mount & Muchinsky, 1978; Muchinsky & Mo-nahan, 1987). Because interests are contextualized (i.e., interest is expressed within an implied environment), vocational interests implicitly incorporate the work environment (Rounds & Su, 2014). Thus, PE fit is somewhat inherent when interests are involved (Van Iddekinge, Putka, et al., 2011; Van Iddekinge, Roth, et al., 2011).

Person–organization (PO) fit and person–job (PJ) fit are closely related and often have been studied together in selection research (e.g., Kristof-Brown, 2000; Lauver & Kristof-Brown, 2001; Sekiguchi, 2004; Sekiguchi & Huber, 2011). Scholars in career counseling have focused on person–vocation fit (e.g., Ehrhart & Makransky, 2007), whereas I-O psychologists have focused on PO and PJ fit (e.g., Nye et al., 2012). In meta-analytic research, PE fit (operationalized as in-terest congruence) was found to be predictive of task performance (r = .30), organizational citi-zenship behavior (r = .37), and persistence in the job (r = .30; Nye et al., 2012). Likewise, Kristof-Brown, Zimmerman, and Johnson (2005) found PJ fit to be predictive of job satisfaction (r = .56), organizational commitment (r = .47), intent to quit (r = -.46), and performance (r = .20). Preentry, PJ fit correlated with organization attraction (r = .48) and the organization's intent to hire (r = .67; Kristof-Brown et al., 2005). Kristof-Brown et al. found PO fit to be a significant predictor of job satisfaction (r = .44), organizational commitment (r = 51), intentions to quit (r = -.35), task performance (r = .13), and organizational citizenship behavior (r = .27).

Given both the speculation and the empirical evidence regarding the use of interest in-ventories in I-O applications (e.g., selection, placement, evaluation, development; Kwaske, 2004; Muchinsky, 1999; Van Iddekinge, Putka et al., 2011), the second objective of our study was to obtain expert opinion on whether interest inventories should be used for employee se-lection.

Administrative and Psychometric Properties of Interest Inventories

Administrative properties. There are many potential benefits to utilizing interest inven-tories for employee selection. Some administrative benefits include short administration time and cost savings (Chope, 2011). Other benefits include ease of administration, scoring, and in-terpretation (Kwaske, 2004). Many interest inventories can be administered online, and include automated scoring and reports. Because many interest inventories were designed as self-assessments, inventory items and results are easy to use and to understand.

Reliability. Interests tend to be stable and yield reliable measures with typical coefficients of stability of approximately r = .80 (Harrington, 2006; Low, Yoon, Roberts, & Rounds, 2005; Swanson & Hansen, 1988; Van Iddekinge, Putka et al., 2011). These test–retest reliability coefficients exceed what typically are observed for personality measures (Low et al., 2005; Swanson & Hansen, 1988).

Validity. There is support for the predictive validity of interest inventories for a variety of important selection criteria (e.g., satisfaction, performance, and persistence; Mount & Muchinsky, 1978; Nye et al., 2012; Savickas, Taber, & Spokane, 2002; Van Iddekinge, Putka et al., 2011; Van Iddekinge, Roth et al., 2011). Some relationships between interest inventories and outcomes can be linked to bottom-line organizational outcomes (e.g., motivation, job per-formance, and retention; Judge, Thoresen, Bono, & Patton, 2001; Nye et al., 2012; Van Id-dekinge, Putka et al., 2011; Van Iddekinge, Roth et al., 2011), which can lead to increased prof-its. Accordingly, the overarching purpose of our study was to investigate further the use of vo-cational interests and their potential in selection.

Legal **Issues**

Instruments used in selection decisions are tests and are subject to all EEO laws (e.g., Ti-tle VII, ADEA, ADA, etc.). Historically, interest inventories have not been used for selection deci-sions. It would be informative to provide expert opinion on potential liability when using inter-est inventories for selection.

Fouad and Mohler (2004) found that, for a number of interest inventories, men and women differ in interests at both item and scale levels, evidence that aligns with occupational sex-role stereotyping (Albrecht, 1976). This evidence for gender group differences may lead to potential disparate impact and employer liability.

Turner, Unkefer, Cichy, Peper, and Juang (2011) found that young adults with disabilities had a distribution of interests and estimated abilities similar to young adults in the general population. However, only 31% of the disabled young adults surveyed were employed in jobs that matched their Holland code (Turner et al., 2011). This percentage may indicate misem-ployment and potential disparate impact for disabled workers in addition to their underem-ployment (e.g., disabled persons unemployment rate of 14.5% compared to nondisabled per-sons unemployment rate of 6.5%; Bureau of Labor Statistics, 2014).

Case law. As of 1973, there were no recorded judicial decisions involving direct chal-lenges to the use of interest testing in educational or employment settings (Fitzgerald & Fisher, 1974). A cursory review of court cases indicated that since 1973 this continues to hold true. That is, to date, the use of interest inventories has not been directly challenged in court. How-ever, it should be noted that interest inventories have been mentioned in several lawsuits as a component of test batteries in education (i.e., claims filed under the Individuals with Disabilities Education Act; e.g., Carrie I. EX REL. Greg I. v. Department of Educ., 2012; D.C. EX REL. T.C. v. Mount Olive Township Board of Education, 2014; Dudley v. Lower Merion School District, 2011; Edie F. Ex Rel. Casey F. v. River Falls School Dist.2001) and disability benefits (i.e., claims filed under the ADA; e.g., Null v. Community Hospital Association, 2009; Shoemate v. Astrue, 2008; Sparks v. Barnhart, 2004; Thurn v. Apfel, 1998).

Considering (a) changing workforce demographics (Chope, 2011; Fouad & Spreda, 1995), (b) employment law and guidelines regarding discrimination against protected groups, and (c) mixed evidence for the use interest inventories with protected groups, a final objective of our study was to investigate the perceived legality of interest inventories used in employee selection.

We generated three hypotheses for the study.

Hypothesis 1: A majority of respondents (i.e., greater than 50%) will indicate that interest inventories should be used for employee selection.

Hypothesis 2: A majority of respondents will indicate that more research on interest inventories is warranted.

Hypothesis 3: A majority of respondents will indicate that the use of interest inventories would lead to legal liability for the employer.

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Participants

SI-OP members with expertise in selection and/or EEO law were recruited to participate in the survey through multiple methods (i.e., email request, mail request to SIOP members identified as selection experts, request at the SIOP conference). The overall response rate was 12.9%; 88 I-O psychologists completed the survey. Two respondents not geographically located in the US and five graduate student respondents were excluded from the analyses, providing a final sample of 81. Respondents were predominantly male (68.3%) and White (88%); the medi-an age fell within the 35 to 45 year range. Respondents were geographically diverse, collective-ly indicating 22 states as their place of business.

Instrument

The survey instrument consisted of 20 items that assessed opinion regarding interest inventories and their utility for employee selection. Fifteen items used five-point rating scales, three items were open-ended, one item was a checklist, and one item was yes/no.

Results

Respondents rated their level of knowledge regarding vocational interest inventories. Approximately 19% reported that they had "very little" or "little" knowledge of interest inventories.

As such, these respondents were excluded from the remaining analyses, leaving a sam-ple size of 66.

Hypothesis 1, which stated a majority of respondents would indicate that interest inven-to-ries should be used for employee selection, was tested by a one sample z-test for proportion and was not supported (n = 66, z = -2.58, p > .05). Only 34.8% of participants agreed or strongly agreed that interest inventories should be used as a component in employee selection decisions (M = 3.08, SD = .95).

Hypothesis 2, which stated a majority of respondents would indicate that more research on interest inventories is warranted, was tested by a one sample z-test for proportion and was supported (n = 66, z = 6.28, p < .05). Approximately 89% of participants agreed or strongly agreed that further research on interest inventories is warranted (M = 4.24, SD = .63).

Hypothesis 3, which stated a majority of respondents would indicate that the use of in-terest inventories would lead to legal liability for the employer, was tested by a one sample z-test for proportion and was not supported (n = 66, z = -5.29, p < .05). Only 18.2% of the re-spondents agreed with the statement that the use of interest inventories as a component in employee selection decisions would lead to legal liability for an employer (M = 2.67, SD = .88).

Additional Analyses

Employee selection. A majority of participants indicated that interest inventories may have incremental validity over traditional selection procedures in personnel decisions for training (56.1%), hiring (56.1%), and lateral transfer (54.5%); 39.4% indicated incremental validity for promotion decisions. Fewer than 20% of respondents expected interest inventories to have incremental validity for licensing and certification, downsizing, or demotion.

Discriminatory effect. As with the legal liability question, participants indicated that the use of interest inventories is not likely to have a discriminatory effect on legally protected groups (only 16.7% agreed or strongly agreed likely discriminatory impact, z = -5.54, p > .05, M = 2.42, SD = .95). There was a moderate correlation between agreement that the use of inter-est inventories will lead to discriminatory effects and agreement that the use of interest inventories will lead to legal liability (r = .52, p < .01). Across all protected classes, respondents indi-cated relatively low likelihood that the use of interest inventories would result in discrimination against a given protected group. Mean ratings ranged from unlikely for race (M = 2.46, SD = .77), national origin (M = 2.50, SD = .87), and religion (M = 2.13, SD = .77) to somewhat likely for gender (M = 2.90, SD = .79) and age (M = 2.75, SD = .95).

Potential risks. Participants were asked to identify potential risks involved in using inter-est inventories in selection. Participants identified 77 concerns. Twenty-eight of these concerns (36.4%) dealt with psychometric issues (e.g., validity, social desirability, and faking); 20 (27.3%) with legal concerns (e.g., discrimination, adverse impact, gender or race issues); 19 (22.6%) involved how the scores would be used (e.g., criterion issues, how to interpret, selection for groups/teams); and 10 (14.3%) addressed administrative issues (e.g., perceptions of fairness, organizational buy in).

Benefits. Participants were asked to identify applications in I-O psychology for which in-terest inventories would be beneficial. Participants identified 90 potential applications. These included 50 (55.55%) involving assessment (e.g., PO fit, PJ fit, motivation, and retention); 32 ad-dressing (35.55%) developmental purposes (e.g., career planning, self-selection, matching and placement,

training and development); and 16 (17.78%) related to psychometric properties (e.g., predictive and incremental validity, face validity).

Discussion

I-O psychology has given limited attention to the use of interest inventories for tradi-tional I-O activities despite meta-analytic data indicating their utility (Nye, et al. 2012; Van Id-dekinge, Roth et al., 2011). The empirical support for interest inventories in selection contexts is of little use unless I-O psychologists are aware of it. Some 19% of experts in selection and employment law indicated they had little or very little knowledge of vocational interests. How-ever, 89% of experts indicated further research on vocational interests is warranted.

Generally, study participants did not recognize the potential utility of interest invento-ries in selection. Only 34.8% of participants agreed interest inventories should be used in selection. However, participants did not expect the use of interest inventories for selection to result in illegal discrimination or adverse impact for most protected groups. Participants identified several other I-O applications for which interest inventories may be utilized such as preemployment purposes (e.g., investigating job seeking behaviors, recruitment, job design and classification, realistic job previews, etc.), assessment, individual development, and organiza-tional development, as well as positive selection decisions such as placement, training, and re-structuring. Furthermore, in these positive selection contexts, experts expected interest inventories to have incremental validity over traditional selection instruments; however, the same did not hold true for negative selection contexts (i.e., downsizing and demotion). Our findings are consistent with Van Iddekinge, Putka et al. (2011), who found interests had incremental validity over cognitive ability and personality measures for job performance, knowledge, and per-sistence criteria.

Participants indicated potential utility of interest inventories for areas such as assess-ment (e.g., employee attitudes, performance, retention), I-O and non-I-O applications (e.g., pre-employment behaviors, education, career counseling), and attaining good psychometric (i.e., validity), and administrative properties. Participants also indicated applications in education and career counseling for which interest inventories have traditionally been used and have strong empirical support.

That interests are predictive of PE fit should have value for I-O psychology. Good fit (both PJ fit and PO fit) can yield important desirable outcomes for individuals and organizations including positive attitudes and well-made decisions prior to employment (e.g., applicant at-traction and job acceptance), and attitudes and behaviors during employment (e.g., job satis-faction, performance, avoidance of withdrawal behaviors, organizational commitment, and re-tention; Ehrhart & Makransky; Kristof-Brown, et al., 2005; Nye et al., 2012). That PE fit is pre-dictive of positive individual and organizational outcomes has been attributed to its motivation-al effects (Rounds & Su, 2014); that is, individuals whose interests and abilities are congruent with their job and organization are more likely to be motivated to do well.

In conclusion, the opinion of the I-O experts suggests interest inventories may hold promise for employee selection decisions and that, most likely, utility will likely come from in-cremental validity over ability tests. Experts with knowledge of EEO law and its implications in-dicated interest inventories are unlikely to lead to employer liability for adverse impact or dis-crimination.

The results of our study indicate I-O psychologists believe interest inventories likely have an array of useful applications in I-O psychology. In fact, there is empirical evidence of the utili-ty of interest inventories for predicting performance, satisfaction, organizational citizenship be-havior, and persistence in the job (Nye et al., Van Iddekinge, Putka et al., 2011; Van Iddekinge, Roth et al., 2011). Our study documents the need to educate I-O psychologists on the utility of interest inventories for selection purposes that benefit applicants, employees, and the organiza-tion.

Notes

- 1 This research was partially supported with a grant from the Western Kentucky University Graduate School.
 - 2 Amy Mandelke current affiliation: Otter Tail Power Company, Fergus Falls, MN
- 3 One reason for reluctance among I-O practitioners to use interest inventories in selection may be that meta-analytic findings for the predictive validity of interest inventories have not been overly promising. Hunter and Hunter (1984), in a meta-analysis of three studies of interest inventory validity, reported a mean validity of .10. More recently, Van Iddeking, Roth, Putka, and Lanivich (2011) reported a .14 corrected validity in their meta-analysis of 80 studies. Results by type of interest inventory revealed that mean validities ranged from .10 for con-struct focused scales (e.g., Self-Directed Search) to .23 for vocation-focused scales (e.g., Strong Interest Inventory).

References

Albrecht, S. L. (1976). Social class and sex-stereotyping of occupations. Journal of Vocational Behavior, 9, 321-328.

Betz, N. E., & Borgen, F. H. (2000). The future of career assessment: Integrating vocational interests with self-efficacy and personal styles. Journal of Career Assessment, 8, 329-338.

Blau, G. J. (1987). Using a person–environment fit model to predict job involvement and organi-zational commitment. Journal of Vocational Behavior, 30, 240-257.

Bureau of Labor Statistics. (2014). Economics news release. Retrieved from http://www.bls.gov/news.release/empsit.t06.htm

Carrie I. EX REL. Greg I. v. Department of Educ. (2012) 869 F. Supp. 2d 1225

Cates, J. A. (1999). The art of assessment in psychology: Ethics, expertise, and validity. Journal of Clinical Psychology, 55, 631-641.

Cole, N. S. & Hanson, G. R. (1974). Impact of interest inventories on career choice (ED 095 370). Washington DC: National Institute of Education.

Chope, R. C. (2011). Reconsidering interests: The next big idea in career counseling theory research and practice. Journal of Career Assessment, 19, 343-352.

D.C. EX REL. T.C. v. Mount Olive Township Board of Education (2014) Civil No. 12-5592

Dudley v. Lower Merion School District (2011) Civil Action No. 10-2749

Edie F. Ex Rel. Casey F. v. River Falls School Dist. (2001) 243 F.3d 329 (7th Cir.)

Ehrhart, D. E., & Makransky, G. (2007). Testing interests and personality as predictors of person–location and person–job fit. Journal of Career Assessment, 15, 206-226.

Fitzgerald, L. E., & Fisher, B. J. (1974). Legal issues: Status report (ED 095 366). Washington DC: National Institute of Education.

Fouad, N. A., & Mohler, C. J. (2004). Cultural validity of Holland's theory and the Strong Interest Inventory for five racial/ethnic groups. Journal of Career Assessment, 12, 423-439.

Fouad, N. A., & Spreda, S. L. (1995). Use of interest inventories with special populations: Women and minority groups. Journal of Career Assessment, 3, 453-468.

Harrington, T. F. (2006). A 20-year follow-up of the Harrington-O'Shea Career Decision-Making System. Measurement and Evaluation in Counseling and Development, 38, 198-202.

Harrington, T., & Long, J. (2013). The history of interest inventories and assessments in career counseling. The Career Development Quarterly, 61, 83-92.

Hunter, J. E., & Hunter, R. F. (1984). Validity and utility of alternate predictors of job performance. Psychological Bulletin, 96, 72-98.

Hunthausen, J. M., Truxillo, D. M., Bauer, T. N., & Hammer, L. B. (2003). A field study of frame-of-reference effects on personality test validity. Journal of Applied Psychology, 88, 545-551.

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. Psychological Bulletin, 127, 376-407.

Kristof-Brown, A. L. (2000). Perceived applicant fit: Distinguishing between recruiters' perceptions of person—job and person—organization fit. Personnel Psychology, 53, 643-671. doi:10.1111/j.1744-6570.2000.tb00217.x

Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person—job, person—organization, person—group, and per-son—supervisor fit. Personnel Psychology, 58, 281-342.

Kwaske, I. (2004). Individual assessments for personnel selection: An update on a rarely researched but avidly practiced practice. Consulting Psychology Journal: Practice & Re-search, 56, 186-194.

Lauver, K. J., & Kristof-Brown, A. (2001). Distinguishing between employees' perceptions of per-son—job and person—organization fit. Journal of Vocational Behavior, 59, 454 -470. doi:10.1006/jvbe.2001.1807

Low, D. K. S., Yoon, M., Roberts, B. W., & Rounds, J. (2005). The stability of vocational interests from early adolescence to middle adulthood: A quantitative review of longitudinal stud-ies. Psychological Bulletin, 131, 713-737.

Mikulak, A. (2012). Employee interests predict how they will perform on the job. Association for Psychological Sciences Observer, 25(7), 7.

Mount, M. K., & Muchinsky, P. M. (1978). Person–environment congruence and employee job satisfaction: A test of Holland's theory. Journal of Vocational Behavior, 13, 84-100.

Muchinsky, P. M. (1999). Applications of Holland's theory in industrial and organizational settings. Journal of Vocational Behavior, 55, 127-135.

Muchinsky, P. M., & Monahan, C. J. (1987). What is person—environment congruence? Supple-mentary versus complementary models of fit. Journal of Vocational Behavior, 31, 268-277. DOI: 10.1016/0001-8791(87)90043-1

Null v. Community Hospital Association (2009) No. CIV-08-297-F

Nye, C. D., Su, R., Rounds, J., & Drasgow, F. (2012). Vocational interests and performance: A quantitative summary of over 60 years of research. Perspectives on Psychological Sci-ence, 7, 384-403.

Rounds, J., & Su, R. (2014). The nature and power of interests. Current Directions in Psychologi-cal Science, 23, 98-103. DOI: 10.1177/0963721414522812.

Savickas, M. L., Taber, B. J., & Spokane, A. R. (2002). Convergent and discriminant validity of five interest inventories. Journal of Vocational Behavior, 61, 139-184.

Sekiguchi, T. (2004). Person–organization fit and person–job fit in employee selection: A review of the literature. Osaka Keidai Ronshu, 54, 179-196.

Sekiguchi, T., & Huber, V. L. (2011). The use of person—organization fit and person—job fit information in making selection decisions. Organizational Behavior and Human Decision Processes, 116, 203-216. doi:10.1016/j.obhdp.2011.04.001

Shoemate v. Astrue (2008) No. 8: 07-cv-152-T-TBM

Sparks v. Barnhart (2004) 334 F. Supp. 2d 1141

Spokane, A. R., Meir, E. I., & Catalano, M. (2000). Person—environment congruence and Holland's theory: A review and reconsideration. Journal of Vocational Behavior, 57, 137-187.

Swanson, J. L., & Hansen, J. I. C. (1988). Stability of vocational interests over 4-year, 8-year, and 12-year intervals. Journal of Vocational Behavior, 33, 185-202.

Thurn v. Apfel (1998) 994 F. Supp. 1156

Turner, S., Unkefer, L. C., Cichy, B. E., Peper, C., & Juang, J. P. (2011). Career interests and self-estimated abilities of young adults with disabilities. Journal of Career Assessment, 19, 183-196.

Van Iddekinge, C. H., Roth, P. L., Putka, D. J., & Lanivich, S. E. (2011). Are you interested? A me-ta-analysis of relations between vocational interests and employee performance and turnover. Journal of Applied Psychology, 96, 1167-1194. doi.org/10.1037/a0024343

Van Iddekinge, C. H., Putka, D. J., & Campbell, J. P (2011). Reconsidering vocational interests for personnel selection: The validity of an interest-based selection test in relation to job knowledge, job performance, and continuance intentions. Journal of Applied Psychology, 96, 13-33. doi.org/10.1037/a0021193

A publication of the Society for Industrial and Organizational Psychology, Inc.

Four Interpretations of a Correlation Coefficient: Expectancies, Vector Angles, Scatter Plots, and Slopes

Jeffrey Cucina U.S. Customs and Border Protection

Julia Berger ProMedica

Note. The views expressed in this paper are those of the authors and do not necessarily reflect the views of U.S. Customs and Border Protection or the U.S. Federal Government.

Generally, in statistics, the relationship between two variables, x and y, is represented by a Pearson product-moment correlation coefficient (r). However, it can be challenging for nontechnically savvy audiences to interpret the coefficient without extensive statistical knowledge. I-O practitioners often find themselves in situations where they have to deliver the results of correlational analyses to key stakeholders (e.g., company executives, board members, clients) in a nontechnical way. When presenting to senior leadership the results of the criterion-related validation study of a newly developed personnel selection test, I-O practitioners some-times discuss

either the magnitude of the correlation coefficient (r; which in the 16 years of the authors' combined practical experience has rarely made an impact) or a coefficient of deter-mination derived by squaring r. I-O academics face a similar situation when explaining the magnitudes of correlation coefficients to new students and individuals without statistical knowledge. In fact, the issue of communicating I-O findings to outside audiences has gained enough traction to merit a creation of a new column in TIP, Lost in Translation (Litano & Collmus, 2016). It is a common practice to report r2. Although widespread, this approach is mis-leading, because it may limit the interpretability of the statistic (Ozer, 1985; Schmidt & Hunter, 2014). Thus, neither of the aforementioned methods are effective in answering the bottom line question: Can the value of x predict the value of y?

Although several methods for depicting the x-y relationship exist and new methods are beginning to emerge (i.e., Icon Array method; Zhang, 2016), practitioners often use expectancy charts only. An expectancy chart presents the probability that individuals with a specific range of test scores will be successful performers. For example, it might be stated that individuals who score in the top 10% on a test have a 32% chance of being in the top 10% on a perfor-mance measure (this occurs when both variables are normally distributed and have an inter-correlations of .50; Taylor & Russell, 1939). Expectancies have the advantage of readily provid-ing information on the relationship between two variables without requiring sophisticated sta-tistical training (beyond the comprehension of percentages). Currently, there are two main ap-proaches for constructing expectancy charts. The first approach is to use Taylor-Russell tables to obtain expectancies (Taylor & Russell, 1939). The second approach is to use a raw dataset to compute expectancies. Both approaches have limitations (for a full discussion, please refer to Cucina, Berger, and Busciglio [2016, April]). Cucina et al. have proposed a novel methodology for computing expectancies called the bivariate-normal distribution approach.1

To complement the aforementioned methodology, we have assembled four alternative ways to visually depict correlations (see Figure 1). First, expectancy values are shown for differ-ent correlation magnitudes. For example, when the correlation between a predictor (e.g., a test score) and a criterion (e.g., job performance) is .5, we can expect that a top scoring applicant (in the top 25%) has a higher probability (48%) to be an excellent performer (in the top 25%) compared to a lower scoring counterpart (in the bottom 25%) whose probability is only 7%. Second, the magnitudes of the correlations are depicted by the angles of the vectors represent-ing the two variables, which decrease as the correlation increases and the individual differ-ences for the variables become more similar. Vector angles are commonly used in physics, en-gineering, and aviation; however, variables can also be depicted as angles. Third, the magnitudes are depicted using scatter plots for 100 randomly generated cases. As the scores on x and y start forming a straight line, the correlation becomes stronger and begins to approach 1. Fi-nally, the magnitudes are depicted using the slopes of the regression line between the two var-iables.

As can be seen in Figure 1, a correlation of .50, despite only accounting for 25% of the

variance in y and only being at the halfway point on the positive side of the correlational scale, results in a near doubling of the number of superior performers and a four-fold decrease in the number of low performers. We suggest that pieces of this figure be presented to nontechnical audiences when explaining the results of a research study or teaching the concepts of correlational analyses to new students. For example, a finding that a measure of employee engagement correlates .30 with unit-level performance could be explained using the expectancy val-ues

of 38% and 14%, the scatter plot, the slope, or the vector angles. Reliability coefficients could also be interpreted using this chart by converting the reliability coefficient to its square root, the reliability index (i.e., the correlation of the observed score with the true score). Any psychological measure with a reliability of .80 or higher can be roughly interpreted using the correlation of .9. We hope that at least one of the graphics in Figure 1 will help others more fully understand the magnitude of correlation coefficients and assist with the translation of sta-tistical analyses into business plans. We are unaware of any existing charts that attempt to combine this information.

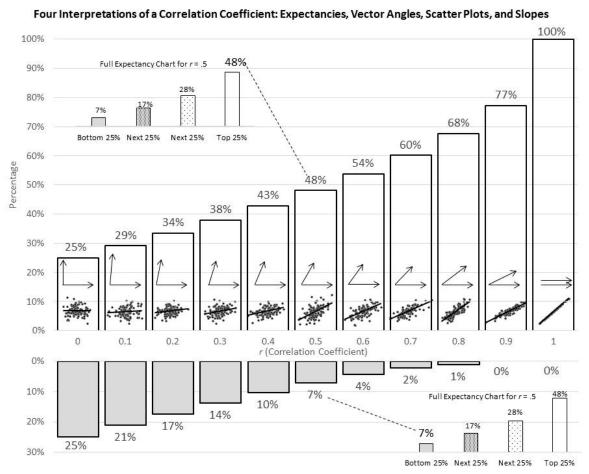


Figure 1. The top portion of the chart shows the expectancies for the high scorers and the bottom portion shows the expectancies for the low scorers.

Note: Two copies of a full expectancy chart are included for explanatory purposes. The expectancies were obtained using Cucina et al.'s (2016) R syntax, which implements a formulaic approach for determining probabilities based on a bivariate-normal distribution.

Note

For the R script and the step-by-step instructions, please refer to Table 2 in the poster titled "69-4 Cucina, Berger, Busciglio" available in the SIOP Document Library on www.siop.org

References

Cucina, J. M., Berger, J. L., & Busciglio, H. H. (2016). Creating expectancy charts: A new approach. Poster presented at the 31st Annual Conference of the Society for Industrial and Organizational Psychology, Anaheim, CA.

Litano, M. L., & Collmus, A. B. (2016). Lost in translation: Communicating the value of I-O. The Industrial-Organizational Psychologist, 54(1). Available online at: http://www.siop.org/tip/july16/lost.aspx.

Ozer, D. J. (1985). Correlation and coefficient of determination. Psychological Bulletin, 97(2), 307-315.

Schmidt, F. L., & Hunter, J. E. (2014). Methods of meta-analysis: Correcting error and bias in research findings. (3rd ed.). Thousand Oaks, CA: SAGE Publications Inc.

Taylor, H. C., & Russell, J. T. (1939). The relationship of validity coefficients to the practical effectiveness of tests in selection: discussion and tables. Journal of Applied psychology, 23(5), 565.

Zhang, D. C. (2016). Using icon array as a visual aid for communicating validity infor-mation (Unpublished doctoral dissertation). Bowling Green State University, Bowling Green, OH.

SIOP's Advocacy for Corporate Social Responsibility,
Humanitarian Work Psychology,
and Sustainable Development Continues:

The SIOP CSR Summit

A publication SIOP-United Nations Committee and Organ

Deborah E. Rupp, Purdue University
Lori Foster, North Carolina State University
John Scott, APTMetrics
Lise Saari, New York University
Mathian Osicki, IBM
Kristin Charles, Amazon
Walter Reichman, OrgVitality
Mary O'Neill Berry, (retired) Sirota Consulting
Drew Mallory, Purdue University
Dan Maday, Capsim Management Simulations, Inc.



For the last several years, SIOP has put great effort into emphasizing the prosocial side of our field. This involves both science and practice that seeks to benefit others and/or society as a whole. It has included SIOP's Veteran Transition Project, the Poverty Research Group, the Volunteer Program Assessment project, and many other individual projects led by SIOP members. SIOP also partners in multiple ways with the Global Organisation for Humanitarian Work Psychology in fulfilling their mission to bring together I-O and other areas of psychology with deliberate and organized efforts to enhance human welfare. Our role within the SIOP United Nations Committee is to represent SIOP as a consultative nongovernmental organization (NGO) for

the Economic and Social Council of the United Nations in promoting I-O knowledge in ways that will assist in the attainment of the United Nations Sustainable Development Goals; and, con-sistent with SIOP's participation in the UN Global Compact, to support initiatives that promote principles of human rights, labor fairness, environmental sustainability, and anticorruption.

For the first time, SIOP has recently been successful in obtaining federal funding for facilitating its prosocial mission. This has culminated in a National Science Foundation grant (funded by the Science of Organizations program) focused on the psychology of corporate social responsibility (CSR) awarded to Purdue University with SIOP as a subawardee. This grant funded the Corporate Social Responsibility Summit, a SIOP preconference event at the Hilton Anaheim (April 12-13, 2016) aimed at uncovering new directions for psychological research on corporate social responsibility and catalyzing new collaborative multidisciplinary projects among scholars who might otherwise remain isolated from one another.

The summit consisted of networking opportunities, keynotes from top scholars, research updates and summaries, practice highlights, multidisciplinary commentary, group discussion, and time for break-out work focused on identifying gaps and planning for new collaborative projects. More than 50 academics, practitioners, and students came together for this day-and-a-half-long summit. Attendees' backgrounds spanned the areas of traditional corporate social responsibility, behavioral ethics, humanitarian work psychology, and environmental sustainabil-ity. Although these might appear as related fields, for most, the experience involved being ex-posed to new areas of research, making new connections, and the development of new collabo-rative project ideas.

The summit kicked off Tuesday afternoon, with dueling presentations by David Jones and Ante Glavas who reviewed what both "micro" (psychological) and "macro" (sociologi-cal/economic) research has uncovered about corporate social responsibility. Stuart Carr then provided a review of the humanitarian work psychology literature, focusing on the "compelling connection" between CSR and living wages. These reviews were then book-ended by presenta-tions by Sean Cruse (of the UN Global Compact) on corporate compliance with principles of so-cially responsible business and Alex Gloss on the private sector's role in sustainable develop-ment.

Following an evening of discussion, networking, and project planning, the summit reconvened the next morning, with presentations and discussion focused on specific (traditional) areas within I-O psychology that could be brought to bear in furthering our knowledge of CSR. David Waldman discussed leadership. Ruth Kanfer and Rustin Meyer discussed performance. Deniz Ones discussed HR and individual differences. It was inspiring to see how the classic top-ics within I-O are so relevant for understanding the science and practice of CSR. It was truly an eye opener for all of us!

After an energized working lunch, the summit turned toward emerging theory and re-search. Paula Caligiuri discussed her work on corporate volunteerism. Akwasi Opoku-Dakwa presented a theory of employee engagement in CSR initiatives. Chelsea Willness presented findings showing CSR's "dark side"—that is, ways in which CSR efforts can backfire if not man-aged properly. By this point in the program there were no doubts about I-O psychology's "seat at the CSR table" and the many directions our future research and practice might take us.

These presentations were followed by a "research incubator" period where attendees discussed and received feedback on their work in progress. For example, Tammy Allen and Julie Olson-Buchanan presented ideas around how mentoring can aid small business development in

the developing world. Isaac Smith discussed a project aimed at integrating CSR with research on behavioral ethics that considers the moral regard of various stakeholders. Mahima Saxena and John Scott provided an update on their SIOP-funded project focused on work experiences within the informal economy. Other "speed-briefings" were provided by Frances Milliken, Bombie Salvador, Jennifer Robertson, Cynthia Pury, Timur Ozbilir, and Yeon Jeong Kim.

All in all, the opportunity for researchers and practitioners to come together from related but previous unconnected fields was energizing and motivating. This excitement was channeled into the last segment of the summit, which involved the formation of self-organizing groups fo-cused on making postsummit progress. Groups naturally formed around the topics of CSR and positive psychology, living wages, leadership, CSR interventions, internal CSR, green initiatives, indicators of embedded vs. peripheral CSR initiatives, and failed CSR expectations among stakeholders.

The CSR Summit Planning Committee (Deborah Rupp, Ron Landis, Milt Hakel, Drew Mal-lory) is busy at work planning follow-up activities. A first goal is to expand the summit group to include the many individuals who were not able to attend or be accommodated at the summit (which due to funding constraints was capped at 50 attendees). A networking reception for these individuals will be convened at the 2017 SIOP conference in Orlando, Florida (again spon-sored by the National Science Foundation Science of Organizations program), where the sum-mit working groups will present on their progress and where the dialogue and follow-up work can continue to expand. Another outcome involves many of the summit presenters publishing their presented work in the forthcoming Oxford Handbook of Corporate Social Responsibility: Psychological and Organizational Perspectives (edited by Abagail McWilliams, Deborah Rupp, Donald Siegel, Gunter Stahl, and David Waldman, available in 2018). Finally, a summit website has been created (http://www.siop.org/csr/) where all of the summit presentations and at-tendee bios have been made publically available, and where follow-up work and announce-ments will also be posted.

The SIOP-UN Committee was proud to play a role in the SIOP CSR Summit. All of the work presented was in the spirit of both the UN Sustainable Development Goals and the UN Global Compact's 10 Principles. These types of event are critical for building bridges between communities of research/practice in the areas of CSR, sustainable development, decent work, and social justice/behavioral ethics. We wish all the newly formed collaborative teams all the best with their ongoing work and are always here as a resource for academics and practitioners do-ing work in these areas.

Advancing the Practice of Industrial-Organizational Psychology: Introducing the IOP Practice Forum

Mark L. Poteet
Organizational Research & Solutions, Inc.
Editor, IOP Practice Forum

John C. Scott APTMetrics, Inc. IOP Editor

Deborah E. Rupp Purdue University SIOP Publications Officer

- Do you have an interesting case study that provides some best practices and lessons-learned for practicing industrial-organizational (I-O) psychology?
- Have you encountered and addressed challenges, obstacles, or setbacks when practicing I-O psychology that could facilitate new ideas, practical guidance, or research questions for the I-O community?
- Do you and your colleagues have differing perspectives on a cutting edge I-O practice issue, service, or topic that could help practitioners learn and advance their practice?
- Do you have thoughts, commentaries, and recommendations about trends and issues impacting the practice of I-O psychology in the future?
- Are you a researcher in real need of insight regarding a practice-related question related to issues you've been exploring?

If so, then consider submitting to Industrial and Organizational Psychology: Perspectives on Science and Practice (IOP's) new Practice Forum ("Forum").

Why a Practice Forum?

SIOP members have, over the years, expressed interest in more practice-oriented publications. For example, in the 2008 Practitioner Needs Survey, "Provide a practitioner journal or newsletter" was one of the top rated services SIOP could provide, with 87% of respondents indicating it would be valuable or highly valuable for I-O practitioner development (Silzer, Erickson, Robinson, & Cober, 2008). Similar results were obtained in the most recent 2015 Practitioner Needs Survey, where providing a practitioner journal or newsletter was ranked among the top three most valuable services SIOP could provide for I-O practitioner development among full-time, part-time, and occasional practitioners (Ferro, Porr, Axton, & Dumani, 2016). Similarly, in the 2011 Member Survey, when asked "What additional services would you like to see SIOP provide?" multiple comments centered on the same notion (e.g., "Practitioner-focused newsletter;" "Practitioner oriented publication; " "A forum for best practice sharing of practitioners"; SIOP, 2011).

What Got Us Here?

The idea of a SIOP-sponsored practice-based publication has been in discussions for several years. For example, one of former SIOP President Tammy D. Allen's initiatives included pursuing a practice-oriented journal concept. Allan Church, SIOP's Publications Officer at the time, led a task force and conducted multiple Executive Board discussions to explore various issues surrounding such an idea. Broad issues such as determining the desired target audience(s) and objectives for the outlet, whether such a concept would be sufficient versus other publication mediums, how to market such an enterprise, how the outlet would integrate with other SIOP publications, and benefits and potential obstacles were addressed. Specific issues explored were the potential content, article formats, presentation platforms, and the editorial and review process.

The conclusion of the process led to the decision to create a space within the existing IOP journal, where a variety of formats could be experimented with, within a preexisting platform accessible to all members with considerable (preexisting) marketing and public relations resources.

What Is the Practice Forum?

The purpose of the Forum is to advance discussion around practice-oriented issues and enhance the understanding of the effective practice of I-O psychology through the publication of original manuscripts using a variety of different content formats. It is intended as a vehicle for providing SIOP members with an outlet for communicating and/or learning about current trends, lessons-learned, best practices, effective practice principles, relevant issues, different points of view, and implementation challenges, associated with practice in I-O psychology.

Submissions could include case studies involving the implementation of I-O services, systems, or tools; descriptions of new techniques, concepts, or approaches for I-O practice; debates/discussions between practitioners on I-O topics; commentaries on challenging or emerging practice issues with calls for research support; summaries of key takeaways from the Leading Edge Consortium; or discussion of implications for practitioners of current research or theoretical issues within I-O. It is also a space where researchers might pose questions to practitioners in order to better refine questions around relevant, practical topics.

Similarly, multiple presentation formats are being considered in order to provide flexibility for SIOP members to present their work. Traditional articles are of course accepted, but slide presentations are also possible, as is including video content that can be hosted on the IOP website to accompany articles or presentations.

Submissions will undergo a peer review process to ensure they meet the Forum's purpose and goals. Each submission will be evaluated against multiple criteria, including clarity of writing; relevancy for the Forum; quality of the work; contribution to I-O practice; and innovation/creativity of the work, ideas, perspectives, and so on. Ultimately, it is important that submissions demonstrate strong integration of science with practice (e.g., use of evidence-based approaches or theoretical models and concepts); provide detailed information from which other practitioners can learn and advance their practice and/or researchers can explore new ideas that may benefit the practice community; and contribute to a greater understanding of best practices, lessons-learned, and principles for the effective practice of I-O.

What Is the Status of the Practice Forum?

- Submissions for future issues are currently being accepted and should be sent to Forum Editor Mark Poteet at mlpoteet@verizon.net. Additional information on submission guidelines, review guidelines, types of articles accepted, etc., can be found on SIOP's website: http://www.siop.org/journal/PFGuidelines.aspx.
- A strong and growing pool of reviewers with practice experience has been secured for the Forum, including several SIOP Fellows and members cutting across multiple employment sectors (e.g., independent practitioner; consulting; industry).
 - The first Forum article will be published in the December 2016 issue of IOP.

Looking Ahead

As with any new initiative, the Practice Forum will continue to evolve and adapt in terms of content, presentation, and structure as submissions are received and published and new ideas and formats are explored. Our goal is to have one submission published in approximately every issue of IOP, although that will depend on both the quality and quantity of submissions received from practitioners. The Forum features an open call, such that submissions are being accepted on a continual basis, although submissions received after the deadline for a specific issue of IOP will be considered for future issues. Current plans call for the Forum to be piloted for 2 years, after which success and contributions will be evaluated.

So, it's up to you, the SIOP community, to help answer the call for more practice-based publication outlets by writing and publishing your practice-based work. You've asked for it, now you've got it! Make it happen!

If you have any questions or thoughts about this exciting new opportunity, please do not hesitate to contact Mark Poteet at mlpoteet@verizon.net.

References

Ferro, M., Porr, B., Axton, T., & Dumani, S. (2016). Practitioner professional development: Results from the 2015 Practitioner Needs Survey. The Industrial-Organizational Psychologist, 53(3), 114-124.

Silzer, R. F., Erickson, A., Robinson, G., & Cober, R. T. (2008). Practitioner professional development. The Industrial-Organizational Psychologist, 46(2), 39-56.

Society for Industrial and Organizational Psychology. (2011, December). Membership survey overall comment report. Available at http://www.siop.org/userfiles/image/2011MemberSurvey/SIOP Membership Overall Comments.pdf

The Georgia Association for Industrial and Organizational Psychology (GAIOP):

A New Stage in the Evolution of Georgia's I-O Community

Nita French French & Associates

A new local I-O group, The Georgia Association for Industrial and Organizational Psychology (GAIOP), was officially incorporated as a not-for-profit professional organization on February 12, 2016. Our metro Atlanta-based group has a new face and new objectives; however, this is just the latest stage in the evolution of the I-O community in Georgia. This article is an account of how we got here, what we've accomplished, and what challenges remain. Because this leg of our journey is just beginning, we wanted also to describe our future aspirations in the hope that more professionals (and students) will want to join us. We hope that our story will be instructive for colleagues in other locations as they contemplate the costs and benefits of getting organized.

It is hardly surprising that Georgia has a critical mass of I-O psychologists and professionals in related fields because of the educational and employment opportunities located here. The Georgia Institute of Technology and the University of Georgia both offer I-O PhD programs in their psychology departments, and the Goizueta School of Business at Emory University offers a doctorate in organizational behavior. In addition, Georgia State University, the University of Georgia, and Valdosta State University offer master's programs in I-O or related fields (http://my.siop.org/GTP; SIOP2016a). Eighteen Fortune 500 companies have their global head-quarters in Georgia, and more than 450 Fortune 500 companies have a presence in the state (http://www.georgia.org/competitive-advantages/pro-business/fortune-500/; Georgia Department of Economic Development, 2016), offering many opportunities for I-O teaching and practice.

Ancient History

Atlanta area I-Os have been networking and collaborating on professional issues at least since the early 1980s when the Atlanta Society for Applied Psychology (ASAP) was first organized (Hoopes, 2004). In the early 1990s, a call to action was sounded when it became clear that the needs and interests of I-O psychologists were not being considered in developing state legislation and regulations concerning the practice of psychology.

Like many other states, Georgia's psychology licensing law was, and remains, a practice law, meaning that anyone who offers fee-based services that employ the principles, techniques, or methods of psychology must be a licensed psychologist. In 1993, the rules issued by the Georgia Licensing Board made it virtually impossible for I-O psychologists working in Georgia to obtain a license. Particularly onerous were the requirements for internship and postdoctoral work experience, both of which had to be supervised by a licensed psychologist. In 1993, a group of I-Os from business and education convened to determine how to respond to Georgia's practice law. As is still true in our profession, there were strong differences of opinion about whether I-O psychologists should be licensed. Nonetheless, operating under the belief that it ought to be at least possible for I-O psychologists to obtain a license, they subsequently drafted changes to the rules for license qualification that would enable I-O psychologists to meet them and would enable midcareer psychologists to qualify for a license on the basis of their education and career accomplishments. A delegation consisting of Jack Feldman, Garnett Stokes, Martin Haygood, and I successfully petitioned the Georgia Licensing Board to incorporate the changes. This made it possible for I-Os to obtain a license, and we hoped that enough would do so to provide supervised practice opportunities for future graduate students and new PhDs who needed or wanted them.

I-O Study Group

As it turns out, we traded the how-do-we-get-a-license challenge for a how-do-we-earn-40-CEs-every-2-years challenge. With few exceptions, only those able to attend SIOP's annual workshops and conference every year would earn enough hours of credit in 2 years to fulfill Georgia licensing requirements. Locally, almost all approved CE programs for psychologists were sponsored by our state association (the Georgia Psychological Association, GPA) and were directed primarily to clinical psychologists, GPA's largest and most active group of members. To make up

the shortfall of I-O CE programs, in 1997 an I-O steering committee consisting of **Mike Moomaw**, **Andy Neiner**, Chris Sloan, **Donna Sylvan**, and I organized the I-O Study Group (I-OSG) for the explicit purpose of planning and delivering CE workshops on topics of interest to I-O and other psychologists whose practice focused on psychology applied to work in organizational settings.

From 1997 through 2015, the I-OSG held at least four workshops every year, always including a biennial ethics session to correspond with license renewal CE requirements. Participation was awarded three CEs by our sponsor, GPA, and the 10 to 20 participants per workshop met in GPA's offices. Fees were low, initially \$50 for a series of four or five workshops and paid to GPA. By 2015, fees increased to \$280 for four workshops for GPA members and \$320 for nonmembers. Approximately 1 in 5 workshops was delivered by nonmember visitors (including Vicki Vandaveer, Nancy Rafuse, Nancy Tippins, Dave Bracken, Mirian Graddick, Tyler Nunnally, Steve Olson, Kurt Kraiger, and Denise Rousseau), all of whom graciously donated their services. Remaining sessions were given by one of the approximately 35 I-O Study Group members who felt that preparing and delivering a 3-hour workshop was a small price to pay for the ability to practice lawfully and contribute to the professional development of the I-O community. For 19 years, the I-OSG successfully fulfilled its CE mission and helped to promote a professional network of area psychologists who enjoyed the opportunity to participate in relevant continuing education sessions and meet with colleagues and friends four times a year.

Nonetheless, by 2015 it was clearly time for a change. Our workshop sponsorship and administration had been operating through GPA, yet members' strongest professional affiliations tended to be with SIOP, Division 13, or SHRM. Although GPA had given us a home for 19 years, our status as a special interest group operating under GPA's auspices was increasingly unsatisfactory. With no budget to call our own, we were unable to pay honoraria or compensate speakers for their travel costs. In addition, our member rolls were no longer increasing and, shockingly, the median age of our members was creeping upward. Lacking the resources to add activities and outside speakers, the I-OSG was still fulfilling its core CE mission but lacked the vitality offered by new voices, a broader membership base, and alternative programming.

GAIOP—Applying the Science of Psychology to Work

A group of 14 members of the I-OSG spent about 6 months exploring what it would take to form and operate as an independent nonprofit corporation, what resources would be required, how I-OSG membership felt about the potential change, and where to go for help. We are grateful to local I-O groups in Chicago, Houston, Minnesota, New York, North Carolina, and Washington, DC for providing advice and sample materials. After much discussion and finding most signs favorable, we decided to take the plunge. Our plan for the new organization was to offer more kinds of programming, more networking opportunities and try to attract a wider audience than the I-OSG, including faculty and students. We also wanted to be self-funded and to continue to provide quality CE workshops for licensed members. Formally, GAIOP's purposes are:

- To benefit its members through the open exchange of information relevant to the field.
- To promote the sharing of ideas and information about psychology as applied to work and human resource management.
- To provide professional development, including continuing education.
- To promote the application of psychological science in the workplace.

The first order of business was to select first-year officers who would set up the organizational structure and systems for the new organization. In recognition of her tireless efforts in keeping the I-OSG organized for its entire history (and because she graciously agreed to do it!), Donna Sylvan was named our first president by proclamation. Donna recruited other first year officers and Board members Alison Mallard and Mike Moomaw, Co-Vice Presidents for Programs; Michele Ingram Mobley, VP for Membership; John Morrison, Secretary/Treasurer; and Nita French, VP for Communications.

The GAIOP Board has had a busy first year. Since January 2016, with help from the Local I-O Group Toolkit (https://my.siop.org/Resources/IOGroups; SIOP 2016b), we have created bylaws; incorporated; instituted various policies; developed a website (https://www.gaiop.org); set membership and dues structures; and established a budget, bank account, payment methods, and communications vehicles. In addition, we have reached an agreement with SIOP to cosponsor our continuing education programs under the auspices of SIOP's status as an approved sponsor with the American Psychological Association (Below, 2016).

Most importantly, as of June 19, 2016, we happily welcomed 32 members, including 3 student members, and developed a set of five outstanding CE workshops to be presented in 2016. Workshop topics included an overview and discussion of selected SIOP 2016 programs, developing midlevel leaders, organizational mentoring, the legal context for selection, and technology-assisted assessment.

Many people and organizations have helped us get to this point. Thank you, **Wanda Hayes** and Emory University for letting us use Emory's conference space for the 2016 CE workshops. We are also indebted to the Management Psychology Group for serving as our official mailbox and for sharing their application software, and to **Linda Hoopes** for setting up and maintaining our website. Finally, we'd like to thank Tracy L. Vanneman, SIOP Programs and Continuing Education Services Manager; **John Cornwell**, SIOP Continuing Education Chair; and SIOP's Continuing Education and Local Group Relations Committees for their advice and support. **Peter Rutigliano**, Chair of SIOP's Local I-O Group Relations Committee commented, "We are quite proud of the work that GAIOP has done this year and have been pleased to help in their transition. GAIOP is an excellent example of how each local I-O group can be designed to meet the specific needs of their members to create an active and sustainable program. To learn more about joining an existing local I-O group or creating your own, please visit http://my.siop.org/Resources/IOGroups." It takes a village to raise a nonprofit, too.

Even though we are off to a good start, we are looking forward to helping unify the Georgia I-O community, providing more networking opportunities, growing our membership, and offering some shorter and more informal programs in 2017. We are also entertaining the possibility of providing internship and employment referrals. If you are in Georgia or travel here frequently for business, please join us!

References

Below, Stephany. (2016). "Best of SIOP" event a success. SIOP partners with local group to offer continuing education. SIOP Newsbriefs, June issue. Retrieved from http://www.siop.org/SIOP_Newsbriefs/2016/June/june.pdf

Georgia Department of Economic Development. (2016). Eighteen Fortune 500 companies have their global headquarters in Georgia, and more than 450 Fortune 500 companies have a presence in the state. Retrieved from http://www.georgia.org/competitive-advantages/probusiness/fortune-500/

Hoopes, L. (2004). ASAP: Atlanta's I-O psychology community. *The Industrial-Organizational Psychologist*, *41*(3). Retrieved from https://www.siop.org/tip/back-issues/Jan%2004/pdf/413_089to091.pdf

SIOP. (2016a). Graduate training programs in I-O psychology and related fields. Retrieved from http://my.siop.org/GTP

SIOP. (2016b). Local I-O groups and related organizations. Retrieved from (http://my.siop.org/Resources/IOGroups).

In Memoriam

James L Outtz 1947-2016



Dr. James L. Outtz was born on December 14, 1947 in Monroe, Louisiana and passed away at his home in Lanham, Maryland, on March 26, 2016 surrounded by his daughter, wife, and dog after a 4-year battle with kidney cancer. Dr. Outtz lived a full and productive life. During his last 4 years he enjoyed major achievements, including the birth of his first granddaughter and being elected president of the Society for Industrial Organizational Psychology (SIOP), where he also established the annual James L. Outtz Grant for Student Research on Diversity. This grant is awarded to a graduate student who has successfully defended, but not yet conducted, a diversity-related re-

search proposal.

Within SIOP his service included Instructional and Educational Officer; chair of the M. Scott Meyers Award Committee; the Distinguished Professional Contributions Award Committee; Ad Hoc Committee on Revision of the SIOP Principles; Program Committee; External Affairs Committee; the Diversity Committee; and the Task Force on Contemporary Selection Practice Recommendations to the Equal Employment Opportunity Commission. Most recently, he served as a member of the Society for Human Resource Management's (SHRM) Certification Commission, along with **Sheldon Zedeck** and Commission Chair **Wayne Cascio**. He rejoined the Executive Board in 2015, the same year he became president-elect. He was scheduled to become SIOP's president in April 2016 at the annual conference in Anaheim. At this conference, President **Steve Kozlowski** announced that the Executive Committee was awarding Dr. Outtz the honor-

ary title of president and that furthermore, in the coming months, the Executive Board will propose a bylaws amendment to provide that any president-elect who passes away before becoming president or who is unable to serve due to medical reasons will be recognized as president in SIOP's historical records.

For more than 40 years, Dr. Outtz was a leading researcher, practitioner, and consultant in the area of employment hiring and promotion, employment discrimination, employment-test design and implementation, and legal issues pertaining to employment. The organization that he founded, Outtz and Associates, developed employment-selection systems focusing on helping employers identify best applicants and also enhancing opportunities for workforce diversity through greater inclusion of minorities and women. Professionally, he focused his career, conducted research, and wrote about minimizing adverse impact through alternative approaches and strategies to selection and promotion. His work has significantly influenced best practices in reducing unnecessary obstacles to equal employment opportunity. His expertise in selection-system design and employment discrimination issues made him a highly sought-after legal-compliance consultant and testifying expert. He represented plaintiffs as well as defendants in cases that involved some of the most prominent corporations in America and some of the most visible public-sector jurisdictions. He was often retained to work on consent decrees with experts and lawyers from all sides of an issue, as well as to advise courts.

Dr. Outtz was a Fellow of SIOP, the American Psychological Association (APA), and the American Educational Research Association. He also worked closely with the APA on behalf of SIOP. He served on APA's Committee on Psychological Tests and Assessment, and he presented a master tutorial at the APA Annual Conference. He served as a mentor to both undergraduate and graduate students, in part by his participation in the SIOP Annual Conference, which includes master tutorials, preconference workshops, panel discussions, symposia and debates. Of special note, and related to his efforts to enhance the practice of employment selection and advancement, is his editorship of the SIOP Frontiers volume, Adverse Impact, Implications for Organizational Staffing and High Stakes Selection (2010). This volume combined scientific research in personnel selection with professional practice issues and situations, consistent with a scientist-practitioner approach to the study of those issues; Dr. Outtz was a strong advocate of the scientist-practitioner model in his own work as well as in his mentoring of others. He also served as consulting editor of the Journal of Applied Psychology. His service to the field of psychology was international in scope. As an example, he delivered the keynote address at the Annual Conference of the Society for Industrial and Organizational Psychology South Africa in 2007 and again in 2015.

Dr. Outtz graduated from Little Flower Academy in Monroe, LA, and the University of Louisiana at Monroe, earning both his undergraduate and master's degrees. After serving as a first

lieutenant in the United States Army, he went on to earn his PhD from the University of Maryland at College Park in Industrial and Organizational Psychology (1976). Dr. Outtz also served as a mentor to many young men and women who were friends of his children. Dr. Outtz leaves his wife of 43 years, Janice Hamilton Outtz; daughter, Dr. Hasina Outtz Reed (Justin); granddaughter, Elle Hamilton Outtz Reed; sister, Zerita Greer; and sisters-in-law, Augustine Outtz and Alice Williams. James Outtz leaves a legacy that will be fondly remembered by his many colleagues and friends for his outstanding contributions to I-O psychology, to SIOP, and to social justice.

Dr Outtz is remembered in the *American Psychologist*: Zedeck, S., & Cascio, W. (2016). James L. Outtz (1947–2016). *American Psychologist*, *71*(6), 510. http://dx.doi.org/10.1037/amp0000021

Call for Proposals for I-O Graduate Program Rankings

Nicholas P. Salter, Joseph A. Allen, Allison S. Gabriel, David Sowinski, and Loren Naidoo

Don't forget: We are seeking proposals for rankings of graduate programs. Please refer to the original Call for Proposals (*TIP*; July 2016) for more details and see below for answers to some questions we have received. As a brief reminder, we are seeking proposals for new and unique methodologies for ranking I-O PhD and MA/MS programs that reflect the diversity of values and strengths across the field of I-O. Multiple ranking methodology submissions will be accepted for publication, resulting in multiple rankings featured in an upcoming issue of *TIP*. We have developed this call in consultation with the *TIP* editor, in response to a need for more comprehensive and updated information about graduate programs.

Submission Guidelines

We are seeking two-page submissions that describe briefly the proposed ranking methodology. Specifically, the first page should explain the criteria to be ranked, as well as the rationale for including them and the specific measures used. This should also include a timeline detailing when each step of the plan will be executed. The second page of the submission should provide information about who is on the author team as well as their qualifications related to successfully executing the proposal. Successful proposals will clearly define how they plan to rank I-O programs as well as the overarching aims/goals that such a ranking would achieve.

Proposals are due to Nicholas Salter <u>nsalter@ramapo.edu</u> by October 15, 2016. Authors should expect to hear back acceptance decisions by November 15, 2016, and the final reports are due November 15, 2017. We note that our goal is to promote open scientific practices in *TIP*. As such, authors should agree to make their data available to others as requested.

Frequently Asked Questions

Who can submit a proposal? Must it be an individual or can it be a team? Can grad students submit? Must the submitter be an academic or can practitioners submit?

Proposals can be submitted by faculty, graduate students, practitioners, or a combination. We are completely open to the composition of the teams, and given that we will ask for a write-up of findings, we are hoping that the teams look quite different. Our only requirement is that at least one member of the team be a member of SIOP (this can include Student Affiliates).

The traditional graduate program rankings primarily (though not exclusively) focus on publications and presentations as criteria, which is important. Can we propose to look at these criteria as an update?

Publications, presentations, and other traditional program ranking criteria are important
factors to consider. Therefore, we do welcome a proposal to update rankings based on
this. That said, we have a particular interest in novel, and perhaps more difficult, criteria to capture. Therefore, we especially encourage individuals and teams to propose
nontraditional methodologies for ranking. By doing so, we hope to capture some of the
intangible qualities of programs that are no less important.

Are nontraditional criteria practical? For instance, job placement of graduates might be really important, but those data aren't easily accessible, and you'd have to survey every grad program to get their data on graduates.

- We agree. Some of these criteria may be very difficult to obtain! However, some of the more difficult metrics might end up being really important. Also, these questions come up with every research study: measure something easy, or measure something hard? After the project is completed, a discussion of these issues (and possible limitations) will be included in the published *TIP* write up. Additionally we can help on our end in the following ways:
 - Encouraging programs to participate
 - Reaching out to department chairs to be open about this information
 - Consolidating efforts wherever possible (e.g., if two teams want to know about grad student placement, one team can ask and share with the other team)
 - Splitting up some of the effort and sharing data across teams

We are happy to coordinate these efforts in order to make it as easy of a process as possible for everyone!

What if I have an idea for an interesting way to rank programs, but I would not be able to actually conduct the ranking in the next year. Can I just propose a methodology but not actually conduct it?

You are absolutely welcome to propose an idea. However, at this time, we are most interested in individuals and teams who will be able to conduct the ranking. Please consider this before submitting a proposal.

Where can I go for more ideas of nontraditional criteria to consider?

In addition to the ideas we included in the original Call for Proposals, check out "Scholarly Impact: A Pluralist Conceptualization" (Academy of Management Learning & Education, Aguinis, Shapiro, Antonacopoulou, & Cummings, 2014) for a discussion of this topic. You can access the article online for free here: http://www.her-managuinis.com/AMLE2014.pdf

I have an idea I would like to propose, but I could use some help identifying a team to help me carry out the proposal. Can you help me?

Absolutely! One hope we have for this is that we will have some overlapping ideas that
can be brought together in a meaningful way. Please submit your proposal and then we
will help make connections across proposals where there is a need or where things
seems to fit together.

Let's say I submit a proposal and TIP wants the completed project. After providing a write-up for TIP, could I use the data for my own other research purposes?

• Yes, sort of. The general rule of thumb about data is that it should not be published twice. So, whatever variables are presented in the final *TIP* article would be "used up" and should not appear in other work. However, if, in the process of carrying out a proposal, additional data is collected for use at a later date, then go for it!

The Inc SIOP 2017: Orlando 7 ational Psychologist 32nd Annual Conference: April 27–29, 2017
A publication of the Preconference Workshops: April 26, 2017 tional Psychology, Inc.

Zack Horn
Program Chair, SIOP 2017
Stitch Fix

Chu-Hsiang (Daisy) Chang Conference Chair, SIOP 2017 Michigan State University

SIOP is looking to the *Future of I-O* in 2017, with several all-new initiatives and an outstanding lineup of forward-focused sessions! Planning for this 32nd Annual Conference in Orlando is well underway, so consider this your official notice to mark your calendars. Don't miss this chance to be a part of shaping the next generation of I-O Psychology.

Submissions

A sincere thanks to everyone who submitted proposals in response to the Call for Proposals drafted by **Daly Vaughn** and his CFP committee! The results of the peer reviews will be e-mailed in early December.

Concurrent Sessions: Something for Everyone

As always, the member-submitted, peer-reviewed sessions will be at the heart of our conference. We will have hundreds of sessions featuring I-O psychology research, practice, theory, and teaching-oriented content. Presentations will use a variety of engaging formats including symposia, roundtables, panel discussions, posters, debates, master tutorials, and the *alternative session type* format for IGNITE, research incubators, and other innovative presentation styles. **New this year:** look for sessions presenting **reproducible research**, the newest SIOP initiative aimed at accelerating our science. In addition, we will have cutting-edge tips and insights from SIOP award winners, a host of Executive Board-sponsored sessions, a forward-focused Thursday Theme Track, and several new special sessions that you won't want to miss!

Thursday Theme Track

The Program Committee is pleased to offer a forward-looking and interactive theme track titled: "Driving Breakthroughs by Anticipating What's Next: Planning for the Future of I-O Psychology." For those unfamiliar, the Theme Track is effectively a conference within the broader conference—a full day of programming on Thursday designed to bring President **Mort McPhail's** vision to life. The Theme Track will celebrate progress through the years, highlight ongoing initiatives that chart a course for the future, propose new frontiers and up-and-coming career paths, and debate what's really new on a variety of trending topics. Chair **Tracy Kantrowitz** and her committee are assembling an exceptional lineup of presenters on a compelling set of future-oriented topics that will provide guidance and insight to all SIOP members on how to prepare for the future. The sessions focus on:

- a retrospective view of the field from I-O thought leaders who will review progress in our science and practice through lens of major historical events;
- predictions from business leaders and strategists who have considered the forces likely to impact the future of work, and what this means for I-O research and practice;
- a panel discussion of I-Os who have embarked on unique career paths that will aim to re-define
 and anticipate a range of careers suited to the future of work;
- an IGNITE session highlighting I-Os working at the intersection of other disciplines who demonstrate the increasingly multidisciplinary nature of I-O, sure to inspire attendees to look beyond the bounds of our field to accelerate the future of our science and practice through multidisciplinary collaboration;
- a debate on the future of several trending areas within I-O that considers what is truly new and necessary to advance the psychology of work.

The Theme Track promises to provide a day of engaging, provocative, and inspiring sessions that will allow attendees to prepare for the future of I-O! These sessions will be scheduled back-to-back in the same room. We invite you to stay all day or attend only the sessions of most interest to you.

Special Sessions

This year we are excited to feature several Invited Sessions throughout the conference, architected by Special Sessions chair **Madhura Chakrabarti** and her committee.

First, we are very excited to introduce *Shaken & Stirred*. Inspired by the wildly popular 20x2 format at Austin's annual SXSW Interactive Festival, Shaken & Stirred is not your typical session—it is a provocative and fun experience designed to inspire and excite. Fifteen boundary-spanning thought leaders from within and outside I-O will be given just two minutes each to answer one seemingly simple question about the future of I-O psychology: "What if...?" Audience engagement is greatly encouraged.

Second, *Reflections on the State of Science* will focus on the dramatic growth of I-O psychology as it enters its second century. This session brings together thought leaders who will review the current state of the science while highlighting critical future research directions in three broad focal areas: (a) building the workforce, (b) experiencing and engaging in work, and (c) managing the workforce. In addition to a growing field of I-O psychologists, both theoretical and methodological advances continue to shape the state of the science in I-O psychology.

The third session adopts the future-oriented theme of SIOP 2017 by highlighting how innovative interdisciplinary techniques can augment traditional I-O methods to detect employee signals. I-O practitioners from the tech industry will discuss how machine learning techniques such as Natural Language Processing (NLP) are being used in people analytics to analyze unstructured data, make sense of large amounts of text, and analyze employee signals to provide meaningful new employee insights.

The fourth session will bring together various perspectives on the topic of *teams* being at the center of next-generation organizations. Declared the #1 trend in 2016 by Deloitte's Global Human Capital Trends Survey, "The New Organization: Different by Design" envisions the new organization as a team of teams. Four practitioners, backed by extensive academic research, will discuss what it means to be operating in a team of teams: how to measure effectiveness, why some teams are liked more than others, whether hierarchical structures can be replaced by teams, which are the strongest predictors of team performance, and more.

Master Collaboration

Each year, the Program Committee creates a Master Collaboration session that connects leading researchers and practitioners on a topic. The goal is to facilitate science—practice connections, enhancing the understanding of the topic from both perspectives and sparking ideas for continued collaboration. This year's Master Collaboration session, What We Didn't Learn in Graduate School, will take a deep dive into the skills that I-O psychologists need to be successful in their careers but were not a part of their formal graduate training. Academics and practitioners will come together for a discussion of some of the most relevant and impactful skills that are not (yet) commonly developed in I-O psychology graduate programs.

Friday Seminars

Friday Seminars offer a unique educational opportunity within the body of the conference. These 3-hour sessions are the only extended-length session on the schedule and take place on Friday. The sessions are intended to provide a rich immersion experience for attendees about cutting-edge content areas presented by true content experts. Each session is shaped around learning objectives in order to ensure that professional developmental goals are met. Please note that Friday Seminars require advance registration and an additional fee. This year's Friday Seminars committee, led by **Kisha Jones**, will offer the following six sessions:

- The Intersection of Diversity and Defensibility (Speakers: **Toni Locklear** and Keith Caver)
- Embedding High-Performance Culture Through New Approaches to Performance Management (Speaker: Elaine Pulakos and Sharon Arad)
- The Use of "Mobile" Devices in Employment-Related Testing and Assessment (Speaker: Winfred Arthur)
- Experience Sampling Methodology (Speakers: Louis Tay and Marilyn Uy)
- Bridging the Scientist—Practitioner Gap: Becoming Better-Informed Consumers of Research Findings (Speakers: Wayne Cascio and Sheldon Zedeck)

 Automated Conversion of Social Media into Data: Demonstration and Tutorial (Speaker: Richard Landers)

Featured Posters

We will once again showcase the top 20 rated posters at an evening all-conference reception. Come view some of the best submissions to the conference while enjoying drinks in a relaxed atmosphere with the presenters. If you've never been to this event, make 2017 the year you check it out!

Communities of Interest

Looking for a SIOP forum that is informal, insightful, and encourages audience interaction and participation? The 2017 Communities of Interest allow you to meet new people, discuss new ideas, and have an active role at the forefront of a hot topic in I-O. These sessions are designed to enhance existing communities and create new ones around common themes or interests. They have no chair, presenters, discussant, or even slides. Instead, they are audience-driven discussions informally moderated by one or two facilitators with insights on a topic of interest. These are great sessions to attend if you would like to meet potential collaborators, generate ideas, have stimulating conversations, meet some new friends with common interests, or expand your network to include other like-minded SIOP members. Chair **Tony Boyce** and the rest of the COI Committee are lining up some great sessions and facilitators for this year's conference, covering a wide range of topic areas:

- Editorial Landscape: Where We've Been and Where We're Going
- Shootings and Hate Crimes: How I-Os Can Help & Support
- I-Os and Space-Related Research
- Technology Trends Leading HR Practice: Key Opportunities for Research?
- Inductive Versus Deductive Research: Both/And, not Either/Or
- Fostering Collaboration Between Data/Computer Scientists and I-Os
- Trends in Learning and Development Research and Practice
- Trends in Job Analysis Research and Practice Vial and Organizational Psychology, Inc.
- Organizational Neuroscience: Innovative Research and Applications
- Multiteam Systems
- Effective Onboarding of Leaders
- Resilience, Grit, Conscientiousness: Research-Based and Practical Distinctions?

Continuing Education Credits

The annual conference offers many opportunities for attendees to earn continuing education credits, whether for psychology licensure, HR certifications, or other purposes. Information about the many ways to earn CE credit at the SIOP annual conference can be found at http://www.siop.org/ce and will be continually updated as more information becomes available.

Closing Plenary and Reception

Your Conference Committee is in the process of finalizing our closing plenary speaker. Although we can't give specifics, we promise you an "out of this world" experience! We will follow the closing plenary with our closing reception. The conference committee invites you to join us on Saturday evening at a *Havana Nights* themed closing reception that will be filled with Latin-American inspired music, dance, and delicious food.

The Conference Hotel

The Walt Disney World Swan and Dolphin Resort will provide an ideal setting for our conference. Our Welcome Reception will be held outdoors in the Garden Pavilions, and entire scholarly program will be held in the Dolphin hotel. The resort offers a wide variety of activities on-site (there are five pools at the resort!), various Disney-related benefits (e.g., transportation to the parks; extended park hours), and is within walking distance from bars and restaurants ranging from family-friendly choices to foodie-approved options. Please see the SIOP Web page for details on booking your room and taking full advantage of all the SIOP conference has to offer.

It's only October when this goes to press, but we hope we've sparked your excitement for SIOP 2017 and Orlando. We can't wait to see you there!

New Expanded SIOP Conference Consortia: Creating Career Pipelines!

On April 27, 2017, the SIOP Consortia Committee will introduce the newly developed **Early Career Practitioner Consortium**, expanding our pre-conference program offerings to four partially integrated consortia. An overarching goal of the consortia is to provide a socialization experience and networking opportunity to graduate students and early career professionals embarking on their career pathways. For 3 decades, consortia have offered such programming to graduate students (Master's Consortium and Doctoral Consortium) and more recently extended the development pipeline to early career professionals pursuing academic careers (Junior Faculty Consortium). We are thrilled to further extend our programming to consultants and practitioners in the first 5 to 6 years of their career tracks.

This four-part program provides a well-rounded, comprehensive career pipelines from graduate student training into early career transitions for I-O psychologists at different career stages and in both applied and academic professions. Consortium participants gain the benefit of information exchange and networking with others within the same career track AND similar stage of career. This partially integrated program allows participants to select track options among open-sessions with broad appeal to a wide audience (e.g., "The Futurists View of I-O") while still enjoying selective closed-sessions for consortium-specific programming (e.g., last year's popular round table discussions with journal editors for Junior Faculty Consortium participants).

These events will happen the day before the SIOP conference, so plan now if you are going to attend. Participants must register prior to the conference and a fee is associated with each consortium. Application to the Master's Consortium and Doctoral Consortium is through nomination process. Nomination forms will be sent via e-mail in early fall to each program's director. The early career programs (Early Career Practitioner Consortium and the Junior Faculty Consortium) do not require nominations. Applicants may indicate interest in these consortia when registering for the conference.

Seating is limited across all consortia programs, so be sure to register early! Registration for all consortia will open in early fall. For more information about these programs, please contact the Consortia Committee members listed below.

Tracey Rizzuto (traceyrizzutolsu@gmail.com), Consortia Chair
Wendy Bedwell (wbedwell@usf.edu), Consortia Chair-in-Training
Adam Hilliard (adam.hilliard@gmail.com), Masters Consortium Chair
Joshua Fairchild (Joshua.fairchild@gmail.com), Doctoral Consortium Chair
Vince Conte (vc746@nyu.edu), Early Career Practitioner Consortium Chair
Lily Cushenbery (l.cushenbery@gmail.com), Junior Faculty Consortium Chair

Announcing SIOP 2017 Preconference Workshops & New Half-Day Option

Emily Solberg CEB

Save the date! Wednesday, April 26, 2017, is the date for the SIOP preconference workshops at the Walt Disney World Swan and Dolphin in Orlando. Join us for a chance to gain hands on experience with cutting edge I-O topics from the field's leading experts, network with your colleagues, and socialize at our premier evening reception!

NEW THIS YEAR — Based on feedback from our past workshop participants, this year we're offering a flexible half-day option for those who are interested in traveling Wednesday morning to attend afternoon workshops (starting at 1:30pm) or who prefer to attend morning workshops and visit local attractions (Disney!) in the afternoon.

The Workshop Committee has identified a diverse selection of inno-vative and timely topics to offer this year as well as a spectacular set of experts to lead these workshops. The lineup includes:

- An Idiot's Guide to Redesigning Performance Management. Alan Colquitt, Eli Lilly; Amu Ramesh, Google, Inc.; Tom Killen, TIAA
- Half Day MBA 2.0. Wayne Cascio, University of Colorado Denver; Pete Ramstad, Capella University
- The Art and Science of Storytelling: How to Influence Others Through Stories.
- Seeing Is Believing: Lessons and Applications for Effective Data Visualization. Christopher Antonik, Air Force Research Laboratory; Chantale Wilson, Air Force Research Laboratory
- Built to Last: Creating and Maintaining Sustainable Selection Systems. Nancy Tippins, CEB;
 Jerard F. Kehoe, Selection and Assessment Consulting
- Honing Your Statistical Superpowers: From Traditional Methods to Big Data. Rod McCloy, HumRRO; Fred Oswald, Rice University.
- Building Your Strategic Talent Analytics Function. Alexis Fink, Intel Corporation; Cameron Kennedy, Independent Consultant

- Legal Update: Plaintiff and Defense Attorney Perspectives on Data, Statistics, and Risk.
 Eric Dunleavy, DCI Consulting; Scott Morris, IIT; David Ross, Seyfarth Shaw LLP; Cyrus Mehri, Mehri and Skalet PLLC
- Creating and Using Employee Data in Organizations: New Methods for a New Age. Don Moretti, Sears Holdings; Subi Dutta, Twitter; & Hailey Herleman, IBM
- Maximizing Resilience at Work: Practical Interventions for Individuals and Teams. Miriam Nelson, Aon Hewitt; Michael Pearn, Pearn Consulting LLC
- Leaders Employees Absolutely Love: Assessing and Developing the Next Generation of Successful Leaders. Jack Wiley, Manchester University; Sandra Davis, MDA Leadership Consulting

Look for the more detailed workshop descriptions in the preconference announcement and on the SIOP website when conference registration opens!

The 2016–2017 Workshop Committee consists of:

Emily Solberg, CEB (Committee Chair)

Gavan O'Shea, Human Resources Research Organization (Committee Chair-in-Training)

Amanda Allen, Edison Electric Institute

Mike Benson, General Mills

Alok Bhupatkar - C2 Technologies

Tori Culbertson, Kansas State University

Melissa Harrell, Google

Don Lustenberger, DDI noustrial-Organizational Psychologist

Alyson Margulies, Uline

Brooke Orr, Coca-Cola e Society of Industrial and Urganizational Esychology, Industrial

Christopher Rosett, Verizon Wireless

Carra Sims, Rand Corporation

Kevin Smith, SEC

APA Council of Representatives Report Lori Foster, Georgia Chao, Deirdre Knapp, and Stephen Stark

The American Psychological Association's (APA's) annual convention provides an opportunity for SIOP members to convene with each other and colleagues from other areas of psychology to network, share ideas, and present research. As has become SIOP tradition, Division 14 was well represented this year at the annual APA convention in Denver, with a strong program of invited and peer-reviewed sessions devoted to a wide range of topics within and outside of I-O psychology.

The annual APA convention also offers the chance for APA's Council of Representatives (COR) to meet. COR convenes twice per year: once in February in Washington DC and once in August during the APA convention. SIOP sends its four elected representatives to each COR meeting to participate in APA governance and help the SIOP Executive Board and membership stay abreast of developments within the profession.

The summer 2016 COR meeting took place in Denver, Colorado on August 3 from 9:00 a.m. to 5:00 p.m. and August 5 from 8:30 a.m. to 12:00 p.m. It was attended by four elected, voting Division 14 members: Georgia Chao, Lori Foster, Deirdre Knapp, and Stephen Stark. The purpose of this article is to give SIOP members a feel for your elected representatives' role and responsibilities, while touching on some key events that took place and issues that were discussed during the course of the August 3 and 5, 2016 COR meetings. This article is not meant to serve as an exhaustive record of every vote that occurred at the August 2016 COR meetings. However, readers interested in such detail can find it in the COR meeting minutes published by APA.

The August COR gathering in Denver began with an opening plenary session on the evening of August 2, 2016. This provided a platform for candidates running for APA president to give a short speech about their qualifications for the position and the types of actions they would take, if elected. During the upcoming election cycle, five people are running for president: Jessica Henderson Daniel, Kurt Geisinger, Rodney Lowman, Ali Mattu, and Steven Reisner. Geisinger and Lowman are both SIOP members. The ballot for voting will be sent to APA members on September 15, 2016.

Deanne Marie Ottaviano, <u>APA's new General Counsel</u>, also spoke during the opening plenary session on August 2. She explained to COR members that a portion of the August meeting would be a closed, "Executive Session," in which observers and participants who are not on the Council of Representatives must leave the room. COR members are not permitted to share the information provided during the Executive Session; it is privileged and confidential. Ottaviano underscored the importance of treating it as such.

Immediately following the opening plenary, caucuses met. APA caucuses are groups of COR members who meet to discuss common interests, including agenda items and upcoming votes with implications for those interests. APA's COR has many caucuses, including but not limited to a Public Interest caucus, a Women's caucus, and an Education and Training caucus. One caucus that we think is especially important for I-O psychology is the General Applied Psychology/ Psychologists (GAPP) Caucus. GAPP is a relatively new caucus, currently chaired by our own Deirdre Knapp, that focuses on psychology as it is practiced by those who are not mental health care providers. Combining our voices with those of other Council representatives with similar interests enables a stronger impact on Council priorities and direction.

The morning following the opening plenary and caucus sessions, the official COR meeting began. The governor of Colorado, John Hickenlooper, kicked things off during the first day of meetings on August 3, welcoming COR to Colorado. Later in the week, Congressman Timothy Murphy (PA) opened the final COR meeting on August 5. Both Hickenlooper and Murphy discussed the importance of policies aimed at addressing citizens' mental health needs. After opening remarks, official COR business began. APA COR meetings follow strict parliamentary procedure, adhering to the rules contained in Keesey's Modern Parliamentary Procedure. For the August meeting, a professional parliamentarian was present to ensure all rules were

properly followed. Having a quick source of expertise on hand seemed to somewhat reduce the amount of time spent discussing and debating violations of parliamentary procedure. Several items came up for a vote during the August 2016 meeting. Some passed, some failed, and some were referred back to their originating mover or committee for revision with the expectation that a modified version of the item will come back to Council for a vote at a future date.

Some items were not particularly contentious. For example, a proposal to create a new APA membership category for "Friends of Psychology" passed with relative ease. This membership category will be open to anyone interested in supporting APA's mission. It allows people without graduate degrees in psychology to easily affiliate with APA in a limited capacity. In order to become official, this new membership category will need to be supported by APA members in an upcoming ballot.

Other items discussed during the August COR meeting were more controversial, including items directly or indirectly stemming from the 2015 Independent Review, otherwise known as the "Hoffman Report." As we have described in more detail elsewhere, the Hoffman Report documents an independent review commissioned by APA to determine the truth behind allegations of wrongdoing pertaining to APA's 2002 and 2005 issuance of ethical guidelines that "determined whether and under what circumstances psychologists who were APA members could ethically participate in national security interrogations" (Hoffman Report, p. 1). Many members feel that COR must take swift action to address problems uncovered in the Hoffman Report and send a strong, visible message to the public regarding APA's ethical stance and opposition to torture. However, some COR members are also concerned that a rush to action or hastily worded policies could have negative, unintended implications, for example, by limiting where and how applied psychologists working within and outside of military settings are able to practice.

Some such issues and concerns came to the fore during the August 2016 Council meeting when COR was asked to adopt as APA policy an item titled "Resolution in Favor of Providing Support and Assistance to Military and National Security Psychologists Striving to Abide by the APA Ethics Code and APA Policy." Essentially, this resolution would say that APA endorses allowing military psychologists to provide mental health care treatment to detainees, regardless of setting. This was controversial primarily because it would modify the stance taken by a resolution adopted in August 2015 that said psychologists should be prohibited from being present in environments that operate outside of international law. This agenda item was discussed at length, and a number of viewpoints were expressed in favor of and against the resolution. There were also some points of confusion. One of the issues raised was ambiguity about what and who a "National Security Psychologist" is, given the prevalence of this term in the proposed resolution. There was also concern that some COR members discussing and debating the matter may not have a clear picture of what operational psychologists working in military settings do, as well as the DoD policies that regulate them. To address this, Division 19 (Military Psychology) president-elect Colonel (Ret.) Sally Harvey spoke to COR for a few minutes during the Friday August 5 meeting to provide information as well as her perspective, having served in the military

as a psychologist for a number of years. Ultimately, this item did not go up for a vote. Instead, it was sent back to a group of supporters and opponents, charged with devising revised wording that would be both clearer and potentially reflect a compromise position. This resolution is expected to return to the Council floor for a vote in February 2017.

Resolutions like the one above reflect APA policy, but changes to the APA Ethics Code (which is also a code adopted by SIOP) are enforceable requirements. The aforementioned August 2015 policy resolution required the Ethics Committee to consider an immediate change to the APA Ethics Code to formalize the restrictions on behavior and settings reflected in the policy. Accordingly, the APA Ethics Committee offered for public comment two alternatives for incorporating a statement related to torture into Standard 3.04 (Avoiding Harm) of the ethics code. The first statement simply said "Psychologists do not participate in, facilitate, assist, or otherwise engage in torture." The second statement was considerably longer and included a prohibition against psychologists practicing in certain settings. SIOP's response was that neither statement was necessary given language already in the ethics code but that the simplest version would be okay and the longer version was not acceptable. Based on their synthesis of the public comment, the Ethics Committee proposed the following addition to Standard 3.04: "Psychologists do not participate in, facilitate, assist, or otherwise engage in torture, defined as any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a person, or in any other cruel, inhuman, or degrading behavior that violates 3.04(a)."

The primary concern expressed on the Council floor was the definition of torture that was added from the original version sent out for public comment. Apparently, the definition used was drawn from another source in partial form and thus could be interpreted more broadly than intended. Your representatives were sympathetic to this concern, but ultimately, the new language was adopted by Council.

Before leaving this topic, it is important to note that APA is planning a more significant overhaul of the Ethics Code and will establish an Ethics Code Revision Task Force (ECTF) by the end of 2016. SIOP, the GAPP caucus, and allied divisions (e.g., Division 13) are working to ensure representation of industrial-organizational psychology on the ECTF.

Another item on the agenda had to do with how the Graduate Record Examination (GRE) is used to select students into psychology graduate programs. This item proposed that Council adopt a resolution discouraging the use of GREs as a cutoff score to determine which graduate school applicants do and do not get considered for admission. The impetus for this proposal was the lack of ethnic diversity in graduate psychology programs. The argument was that discouraging the use of GRE scores as hard criteria would increase ethnic diversity of those admitted to psychology graduate programs. Although there was wide support on the Council floor for diversifying graduate programs, not everyone agreed that this proposal, as worded, was the best vehicle for accomplishing such a goal. Ultimately, this proposal was referred back to its originating committee to revise the language to address concerns expressed during the COR discussion. Given his expertise in psychometrics, incoming SIOP representative Stephen Stark offered to assist in revising this motion. As a side note, this illustrates one of SIOP's roles on

COR. During and in between Council meetings, we look for opportunities to contribute I-O expertise when relevant opportunities arise.

Not every item that comes before Council gets voted on. Some of the items are informational in nature. For example, during the August COR meeting, an update was provided on APA's search for a new CEO to replace acting CEO Cynthia Belar, who succeeded Norman Anderson upon his retirement on December 31, 2015. Korn Ferry is handling the search, which is led by a search committee consisting of psychologists from a range of disciplines. SIOP's president-elect Jim Outtz was to serve on the committee prior to his untimely death on March 26, 2016. SIOP reached out to APA with an offer to suggest a replacement. Unfortunately, APA did not accept this offer.

APA's finances were also discussed during the August COR meeting. In general, the financial picture looks less positive than it has in recent years, due in part to falling membership dues, some publication revenues on the decline, and other financial hits that APA has experienced recently. APA will need to manage this situation carefully and will likely need to find ways to cut expenses. Interim CEO Cynthia Belar indicated that she will seek input from Council regarding priorities as the forthcoming budget is developed.

Each of the two Council sessions in August concluded with a brief "culture check" survey, which asked COR members to rate the degree to which time was managed effectively and discussions unfolded with a spirit of civility. Concerns have been expressed about the tone and tenor of some COR communications—both on its discussion list and on the Council floor—which have been described as lacking in civility. This could discourage members from speaking up, thereby preventing new ideas from surfacing. APA is attempting to address this concern in various ways, including with the use of the above-mentioned culture check survey, as well as a civility working group charged with better understanding the source and nature of the concerns at hand.

In conclusion, there is no doubt that the August 2016 COR meeting covered important ground. Some of the issues that arose have implications for I-O psychology, and some provide opportunities for us to apply our skillset to the broader profession. For this reason, your four Division 14 Council reps sit on SIOP's Executive Board and provide updates to the board on what is happening with APA. We also strive to keep the membership informed. We hope this article has served just such a purpose. If you have questions, comments, or suggestions pertaining to APA, please do not hesitate to reach out to us. We appreciate the opportunity to serve in this capacity and welcome your input.

American Psychological Association Convention 2016: Denver, Colorado

Mindy Shoss 2017 APA Program Chair

SIOP's (Division 14) program at APA was a great success! Thank you to program chair **Tara Behrend**, who put together a fantastic program, and to all who presented at and attended the convention! We heard thought-provoking talks by **Lori Foster**, David Blustein, Terry Tracey, **Alex Gloss, Roni Reiter-Palmon**, Chris Shalley, **Gwen Fisher**, **Nancy Tippins**, **Lynn Offerman**, **Ann Huffman**, **Deirdre Knapp**, Carl Castro, and others on such topics as decent work and humanitarian work psychology, creativity and innovation in organizations, worker health, selecting leaders of leaders, women leaders, work military trends ... and more! We had two poster sessions that featured posters on a wide range of topics within I-O psychology. Beyond our divisional programming, **Bruce Avolio** and **Kelley Slack** delivered exciting plenary session talks on leader development and on behavioral risks on Mars and asteroid missions. And **Eduardo Salas** received the 2016 APA Award for Outstanding Lifetime Contributions to Psychology!

We also had a fantastic reception at The Corner Office Restaurant (fitting, right?)! Our reception was attended by SIOP past presidents, APA council representatives, I-O practitioners, academics, students, and even several new SIOP members. A great time was had by all!

It's not too early to start thinking about next year's convention in Washington DC! If you've never attended APA, please join us. You'll find not only great presentations within I-O but also across other divisions of APA. An added bonus, APA discounts registration fees for first-time attendees who are APA members.

There are two types of programming that you should consider (note the different deadlines!):

Collaborative Programs (collaborative with other divisions):

A collaborative program pulls together multiple perspectives on a significant issue for psychologists and society at large, involves more than one core area of psychology, that is, science, practice, education, public interest, and reflects interdisciplinary and relevant aspects of diversity. The deadline for submitting collaborative programming is **October 14.** Collaborative proposals:

- should be 1- or 2-hour session proposals that highlight collaborative ideas and integrative approaches;
- must have at least two participants and a chairperson (individual presentations [paper/poster] will not be considered);
- are encouraged that
 - o incorporate innovative presentation formats;
 - o include participants across all career stages, settings, and fields; and
 - o integrate psychological science and practice

Collaborative proposals are evaluated on the following criteria: broad appeal, importance of work, current and timely topic, originality and innovativeness, interactive/creative format, scientifically/empirically based, and attention to diversity.

Divisions you might want to consider collaborating with include:

- Div 1: Society for General Psychology
- Div 2: Society for the Teaching of Psychology
- Div 5: Quantitative and Qualitative Methods
- Div 8: Society for Personality and Social Psychology

- Div 9: Society for the Psychological Study of Social Issues
- Div 13: Society of Consulting Psychology
- Div 18: Psychologists in Public Service
- Div 19: Society for Military Psychology
- Div 21: Applied Experimental and Engineering Psychology
- Div 35: Society for the Psychology of Women
- Div 38: Society for Health Psychology
- Div 41: American Psychology-Law Society
- Div 45: Society for the Psychological Study of Culture, Ethnicity and Race
- And many more! Check out the listing of divisions here: http://www.apa.org/about/division/index.aspx? ga=1.260482957.1628625474.1464221820

Traditional Programming: Submissions

You can also submit your work the regular way, as a poster, presentation, or symposium, through the open call, due **December 1**.

How to submit: Submissions for all types of programs will be received through the official APA Convention website (http://www.apa.org/Convention). Remember collaborative proposals are due **October 14.** Other program submissions are due **December 1**.

More information about submission requirements can be found on the APA web site at <u>apa.org/convention</u>.

I-O @ APS 2017—Let's Go to Boston!

The Included Silvia Bonaccio, University of Ottawa

A publication of the Society Margaret Beier, Rice University and Psychology, Inc.

Harrison J. Kell, Educational Testing Service

Christopher Wiese, Purdue University

The Association for Psychological Science's (APS) Annual Convention is an exciting meeting that attracts internationally renowned researchers from every area of psychology, including many of our very own I-O scholars. With over 25,000 members, APS is the premiere international organization solely dedicated to the advancement of psychological science and the application of scientific psychology to the development of public policy. Last year's convention rang in at over 4,000 attendees - a huge success! I-O had a strong presence at APS in 2016, with over 150 poster presentations and a special symposium showcasing student work. Exciting I-O events included two invited symposia (Mental Health at Work, and Aging and Retirement), and several invited talks by I-O scholars, such as **Derek Avery** (*Temple University*), **Alice Eagly** (*Northwestern University*), **Carsten de Dreu** (*University of Amsterdam*), **Michele Gelfand** (*University*) spoke in a conference-wide interdisciplinary symposium on diversity, and both **Tara Behrend** (*George Washington University*) and **Susan Mohammed** (*Penn State University*) spoke in conference-wide, cross-cutting themes. Needless to say, I-O was very well represented.

Some of the highlights of the overall APS program so far are:

- Keynote address by Lila R. Gleitman (University of Pennsylvania)
- Bring the Family address by Laurie R. Santos (*Yale University*)
- Presidential symposium "Sense and Sensibility: How Our Bodies Do—and Don't—Shape our Minds" featuring Susan Goldin-Meadow (*University of Chicago*), Jessica K. Witt (*Colorado State University*), Susan Wagner Cook (*University of Iowa*), Ted Supalla (*Georgetown University*), and Amy Cuddy (*Harvard University*).
- Award addresses by Robert J. DeRubeis (University of Pennsylvania), Susan T. Fiske (Princeton University), Gary L. Wells (Iowa State University), Hazel R. Markus (Stanford University), Daniel L. Schacter (Harvard University), and Robert J. Sternberg (Cornell University)

The I-O Program Committee is hard at work ensuring that that our discipline is well-represented at the 2017 Annual Convention. As such, here will be some wonderful **I-O content in the program at APS 2017**. This section of the program is still in development, so make sure to stay tuned for updates. Here are some of the speakers that you won't want to miss:

- **Dev Dalal** (*University at Albany, SUNY*)
- Reeshad Dalal (George Mason University)
- **Scott Highhouse** (Bowling Green State University)
- Edgar Kausel (Pontificia Universidad Católica de Chile)
- Sabine Sonnentag (University of Manheim)
- John Trougakos (University of Toronto Scarborough)
- Gillian Yeo (University of Western Australia)

In addition, **Belle Rose Ragins** (University of Wisconsin, Milwaukee) will be speaking as part of the APS wide cross-cutting theme "The Many Flavors of Relationships."

In addition to the invited symposia and addresses, the I-O track of the convention program will feature **several symposia and a large number of posters submitted by I-O researchers.** Beginning in October, we encourage you to submit your work at http://www.psychologi-calscience.org/index.php/convention/call-for-submissions

Workshops

In addition to the I-O content at APS, the conference features several workshops that promise to be of considerable interest to I-O psychologists. Last year, workshops were \$65 for regular convention attendees and \$40 for students. This year's workshops are:

- Best Practices for Data Management and Organization with Lorne Campbell (Western University)
- Collecting, Sharing, and Using Video Data with Karen Adolph (New York University)
- Ambulatory Assessment with Tom Kwapil (University of Illinois at Urbana-Champaign)
- Introduction to R with William Revelle (Northwestern University)
- Structural Equation Modeling with Barbara Byrne (*University of Ottawa*)
- NIH Funding for Basic Psychological Science with Rebecca Ferrer (NIH-NCI)

- Bayesian Data Analysis with JASP with Eric-Jan Wagenmakers (University of Amsterdam)
- Intro to the Electronically Activated Recorder (EAR) with Matthias Mehl (University of Arizona)
- Programming with Python with Tal Yarkoni (University of Texas at Austin)
- Other workshops will be announced as they are finalized.

Mark Your Calendars!

If you're excited about, and dedicated to, the advancement of scientific psychology, you won't want to miss the 2017 APS annual convention. The call for submissions will open in October. The symposium deadline is on December 1, 2016, and the Poster deadline is on January 31, 2017 (http://www.psychologicalscience.org/index.php/convention/call-for-submissions). Poster acceptances are communicated on a rolling basis, and so the sooner you submit your work the sooner you'll know if it is accepted for presentation!

The **2017 APS Annual Convention will be held May 25-28 in Boston**, and you're invited to join us at the **I-O happy hour at APS**, which is a great place to make new I-O connections and to get a drink on us!



Stay connected to future developments by following us on Twitter and Facebook.

APS 2016: Ruth Kanfer, Tammy Allen, Lisa Finkelstein, Margaret Beier, and Gwenith Fisher catching up over breakfast before their symposium.

A publication of the Society for Industrial and Organizational Psychology, Inc.

Report of the Executive Director Selection Advisory Committee

Tammy Allen, Milt Hakel, Bill Macey (co-chair), Fred Oswald (co-chair),
Ann Marie Ryan, Neal Schmitt, Nancy Tippins

In our last report, we described our progress in conducting a job analysis of the executive director (ED) position. Now, with a detailed understanding of the position requirements in hand, we have been intensely involved in the design and execution of the selection process itself.

First, we reached out to our colleagues in the assessment and testing community for their ideas and support; subsequently, we designed an assessment protocol that will be fully operational in late September and October—precisely matching our original timeline. During these early stages of executing the protocol, we reached out to over 20 potential partners, conducting a thorough review of potential assessment solutions. We were highly impressed by the quality of the proposals we received, and we are grateful to all those who responded to our inquiry. We remain collectively overwhelmed by the spirit of service to our Society evidenced by our colleagues.

Second, the job announcement was posted on July 6th and has appeared on the website of the American Society of Association Executives (ASAE, https://careerhq.asaecenter.org/jobs), The NonProfit Times Career Match job posting website (https://careermatch.nptimes.com/jobs/), and on the SIOP website. Our job posting noted that applications would be received through September 1, so as we write this we continue to receive inquiries at a steady pace. We have been reviewing candidate credentials as we

have received them, and we have also been conducting follow-up screening interviews, always with two members of the committee participating. We will continue this process through mid-September, at which point we will invite a group of finalist candidates to join us at the Bowling Green Administrative Office and complete the assessment process.

Our next report will hopefully announce the successful completion of our charter: By then, we plan to have the assessment process completed, with our selection recommendations forwarded to the Executive Board. Your comments and suggestions are always welcome. Please direct them to Bill Macey (wmacey9@gmail.com).

SIOP Members in the News

Clif Boutelle

The news media has found SIOP members to be credible sources of information for their workplace related stories. And no wonder! SIOP members have a diverse range of expertise as evidenced by the listings in Media Resources on the SIOP web site (www.siop.org). There are more than 110 different workplace topics with nearly 2,000 SIOP members who can serve as resources to the news media.

SIOP members who are willing to talk with reporters about their research interests and specialties are encouraged to list themselves in Media Resources. It can easily be done online. It is important, though, that in listing themselves, members include a brief description of their expertise. That is what reporters look at and a well-worded description can often lead the reporter to call.

Also connecting with reporters and editors is important as a way to increase I-O's (and SIOPs) visibility and influence. Every mention in the media is helpful to that mission.

It is a good idea for members to periodically check and update their Media Resources information.

Following are some of the press mentions that have occurred in the recent months:

Marcus Crede of Iowa State University was interviewed in the August 11 Education Next Journal, which provides opinion and research on education policy, on the topic of grit, which is part of the Every Student Succeeds Act, which incorporates "non-academic" factors such as grit in the way states define what it means to be a successful school. Crede has conducted a study on grit and he challenges much of the popular narrative. He says grit is barely distinct from other personality traits and that standardized test scores, attendance and study habits are much better predictors of long-term success than grit.

Research by **Sung Soo Kim** of the University of Denver was reported in the August 11 issue of *Business News Daily*. The study found that employees who feel their jobs are threatened are more likely to engage in "facades of conformity" to cope with job insecurity. However, that "can have an adverse impact on one's feeling of attachment to the organization" and affect their job performance and possibly even lead them to quit.

The August 4 issue of *Industrial Safety and Hygiene News* had an article featuring the work of **Ute R. Hulsheger** of Maastricht University in the Netherlands. The fast changing pace of technology creates increasing pressure on employees, which can lead to various psychological

symptoms, including burnout and sleep problems, she said. Hulsheger's research on mindfulness offers the potential for creating systems and tools that will help employees cope with the changing workplace.

Mindy Bergman of Texas A&M University, was an August 9 guest on a radio program on *KPCC* in Los Angeles discussing inclusive workplaces. During the interview she outlined various strategies to offset exclusionary practices and make them more welcoming to employees.

When it becomes necessary for managers to deliver bad news to employees there are ways to make the situation a little easier, according to an August 3 article in *Fast Company*. One way, of course, is being totally honest and don't sugarcoat the news. **Stuart Sidle** of the University of New Haven said transparency is equally important. If the company and managers are not transparent, then the bad news can foster a cynical climate. "Once cynicism infects the work environment, employees are much less likely to be understanding or cooperative in the face of bad news," he said.

Ben Dattner of Dattner Consulting in New York City wrote a blog in the August 1 *Harvard Business Review* suggesting that corporations could gain valuable information about their own organization as well as their industry and competitors by interviewing people who had declined an employment offer. Although it is common for companies to conduct exit interviews with departing employees, it is less common to gather feedback from candidates who received offers but did not accept them, he wrote. "Declined offer interviews and feedback can also provide advance warning about factors that may cause turned down offers, enabling you to take proactive steps to prevent it from happening," he wrote. He also suggested that collecting feedback via a third party might produce more candid results.

In a June 21 HBR post, Dattner wrote about the challenging task for managers of writing and delivering performance reviews. An effective review is often a delicate, complex balancing act and starts with setting goals and objectives. Ideally, by striving for balance, approaching the exercise in an open, mindful manner and getting feedback about the review before and after it happen, managers can provide productive assessments that improve individual, team, and organizational performance, he wrote.

A story in the July 30 issue of *New Yorker* focused on what makes people feel upbeat at work and extensively quoted **Alicia Grandey** of Penn State. The story cited several organizations that mandate positive work environments in their employee manuals. "It sounds really nice...like they are creating a civil workplace," said Grandey. She cautioned that is difficult to impose positivity from the top and actually exert a positive effect. "When anything feels forced or externally controlled, it doesn't tend to be beneficial as when it's coming from the self," she said. "The irony is, when you are trying to get people to do something positive, you can't do it. Once it's required, it's fake and forced. What you create instead is a negative backlash."

Matt Paese of Development Dimensions International (DDI) authored a piece in the July 28 issue of *Smart Business* about getting leaders ready to lead. Although there is a lot of information and training to help people learn how to lead, there's not enough emphasis upon growth, he wrote. There is a critical difference between learning and growth. Learning happens when you acquire new knowledge or skill and growth happens when you use it consistently. Training or coaching or any other formal learning only matters when leaders take what they have learned and use it to address the challenges they are facing in the workplace, he said.

Job hunters have a much better chance of being hired with in-person job interviews versus those conducted over the phone, according to research by George Washington University I-O psychologists. The researchers reviewed 12 studies of professional interviews—both informational and sit downs for specific positions—focusing on those that included at least one face-to-face meeting and one conducted over the phone, video, or computer voice-chat program. They found that regardless of the interview type, the in-person interviews were the most productive for both the organization and the interviewee. "Many times, the candidate does not have a choice in the format of the interview," said **Nikki Blacksmith**, the lead author. "However, the organization does have a choice and if they are not consistent with the type of interviews they use across all candidates, it could result in fairness issues." The study was reported in July 26 New York Magazine.

At a time when new parents may find themselves overwhelmed, a growing number of companies are making efforts to help them through the transition to parenthood by providing coaching sessions, either in person or by the phone. **Leslie Hammer** of Portland State University contributed to a July 22 *New York Times* story on this trend, which organizations hope will retain more women by helping through a stressful time, while eventually improving gender diversity among their senior employees. "When we train supervisors about how to be supportive, we see bottom line effects for the company," Hammer said.

Joyce E. A. Russell of Villanova University School of Business writes a regular Career Coaching column for the *Washington Post*. In her July 21 article, Russell noted that many in this country feel that political correctness has been carried to the extreme and is a societal problem. Yet, looking at dictionary definitions of political correctness and being polite, she doesn't see that much difference. Treating each other with respect and dignity is simply being polite, which is something we all have been taught at schools and at work, she wrote.

Her June 3 article was about the importance of staying calm under pressure and for leaders to take decisive action in a calm and professional manner. One survey she mentioned found that 90% of top performers were able to manage their emotions in times of stress and stay calm and in control.

Not taking all your vacation leave is an unfortunate mistake, said **Matthew Grawitch** of Saint Louis University in a July 18 *NPR Morning Edition* interview. He responded to an NPR survey that found that among people who work 50-plus hours a week, half of them said their workload made it difficult to take a vacation, and 42% said they don't take all the paid vacation they earn because of their workload. "When workers come back from vacation they have more energy, they tend to be more replenished and feel more engaged in their work," Grawitch said. Companies have to actively encourage employees to take their vacation and to take advantage of wellness programs, he said.

A July 6 American Bar Association publication carried a story about research by Lori Berman of Hogan Lovells US, LLP in Bethesda, MD; **Juliet Aiken** of the University of Maryland; and Heather Bock showing how individual success can be achieved in law firms. Their work suggests that skills, mindset and approach to work provide a more compelling picture of who succeeds in law firms than pedigree alone. Their research examines the factors, competencies, and attitudes that allow some lawyers to flourish and make partner while others struggle.

A story on building resilience skills to effectively navigate an increasingly stressful worklife in the June 27 *Harvard Business Review* cited research by **Erik Dane** of Rice University and **Bradley Brummel** of the University of Tulsa. The business world is increasingly turning its attention to mental training practices associated with mindfulness. Research has shown that mindfulness can predict judgment accuracy and insight-related problem solving as well as enhancing cognitive flexibility. Dane and Brummel's work found that mindfulness facilitates job performance.

One popular idea in corporate America is that women are not supportive of each other—that "queen bees" have a negative impact on other women trying to climb professional ranks. That isn't true, says **Adam Grant** of the University of Pennsylvania's Wharton School and cowriter Sheryl Sandberg, CEO at Facebook, in a June 23 piece in the *New York Times*. As women advance in the workplace, the queen bees will go the way of the fax machine. Surveys show that women are being mentored by women and that high-potential women who received support paid if forward by mentoring other women. There is growing evidence that women are indeed supportive of each other, they wrote.

Also, in June, LinkedIn's publishing hub, *Pulse*, listed 10 top thought leaders in a variety of areas important to entrepreneurs. The article urged that those interested in work psychology follow **Adam Grant** as a major influencer in the field. In addition to being a bestselling author and writer for the *New York Times*, he writes on LinkedIn about a broad range of topics, including creativity, generosity, career advice, gender bias, and leadership.

Ken Shultz of California State University San Bernadino contributed to a June 22 Reuters story about a study showing life after retirement is more enjoyable for people. Overall the enjoyment ratings were associated with well-being and better sleep quality compared to preretirement levels. Even participants who continued to work part time reported their enjoyment increased substantially. "People have a different experience when working after retirement and they don't have to deal with the pressure of a career job and people tend to not be emotionally invested in it," he said.

Helping colleagues at work too much could put the helper's career in jeopardy was among the findings of a study by **Russell Johnson** of Michigan State University, **Mo Wang** and Klodiana Lanaj, both of the University of Florida. The draining effects of helping may be especially high for employees who have high prosocial motivation, said Johnson. The results of the study showed that employees should be careful when deciding to assist coworkers, because, in the end, doing so may leave the helpers worn out and not as successful with their own work. The study was reported in the June 15 issue of *Business News Daily*.

A *Psychology Today* post about common emotions with uncommon names by **Ronald Riggio** of Claremont (CA) McKenna College was mentioned in a June 13 column in *Inc Magazine*. The emotions he listed included chrysalism (a sense of warmth, peace, and tranquility), adronitis (a sense of frustration experienced when meeting a new and interesting person), enouement (the desire to wish you could go back in time and tell your past self about the future), and exulansis (frustration experienced when you realize people are unable to understand or relate to something you are talking about).

A story in the *Clarksville* (TN) newspaper assisted **Fred Mael** of Mael Consulting and Coaching in Baltimore with research he is conducting on what makes military veterans successful on

the job after their transition from the service. The paper ran an article noting that Mael is seeking volunteers to interview for his study, which will also look into how spouses play a role in the transition.

The June 10 issue of *Upstate Business Journal* in South Carolina included a column by **Robert Sinclair** of Clemson University about the importance of organizations helping their employees during difficult times, especially those dealing with finances. He listed several steps employers can take to assist employees manage their financial stress, including offering a financial consulting/education program. He also pointed out the benefits of organizations being proactive in helping employees. Research, he said, shows that employees who feel their supervisor and coworkers care about their well-being are more engaged and committed.

Kevin Love of Central Michigan University and **Timothy Munyon** of the University of Tennessee were featured in a June 9 story about office secrets on the website *iMeet Central*. Love said that his research has found that organizations that keep more internal secrets have more barriers in profitability and sustainability. "The fact that you have a culture that allows secrecy at various levels, especially at the top, automatically mitigates potential. Secrecy in and of itself is the antithesis of team orientation and teamwork." Love said. On the importance of transparency, Munyon noted "a lack of transparency can turn people into naïve psychologists who may reach the wrong conclusion, including egregious or inaccurate assessments." He added that middle managers are the most important in shaping culture because they have the power to shape the work environment of their employees.

Tomas Chammoro Premuzic of Hogan Assessment Systems authored an article in the June 8 issue of *Fast Company* on ways to correct bad habits that people may not know they have. He said "many of us don't see the flaws in ourselves that other people do. Step 1 is finding out what you are overlooking. It starts with getting honest, critical feedback from as many sources as possible. Habits take a long time to form, which makes them hard to change. But even if it takes more effort to break them, it isn't impossible to do so. The secret is to really want to change," he wrote.

Sometimes new employees have a tendency to say "yes" to every request, which points to the need to set clear goals, objectives, and activities at the start of a new job, said **Michael Woodward** of Human Capital Integrated in Jersey City, NJ, in the June 3 issue of *Business News Daily*. "The proliferation of mobile technology and social media has changed our expectations about availability, particularly when it comes to work and kids," he said. "It's up to you to take responsibility, set boundaries and unplug when you are with your family," he said. Otherwise, one faces the real possibility of burning out.

An April 25 *Chief Learning Officer* magazine story by **Evan Sinar** and DDI colleague Richard Wellins pointed out the impact soft skills development has on producing better leaders. Those soft skills include interacting with employees and empathy, which may be the most fundamental of soft skills. When it comes to leadership development, we are learning there are compelling reasons to develop soft skills so that our leaders can be their best, they wrote.

Please let us know if you, or a SIOP colleague, have contributed to a news story. We would like to include that mention in SIOP Members in the News.

Send copies of the article to SIOP at <u>boutelle@siop.org</u> or fax to 419-352-2645 or mail to SIOP, 440 East Poe Road, Suite 101, Bowling Green, OH 43402.

IOTAs

David L. Tomczak George Washington University

Honors and Awards

Megan Leasher, director of Talent Assessment and Measurement at Macy's Inc. in Cincinnati, was named a 2016 Rising Star by *Human Resource Executive Magazine*.

Gary Johns has received the 2016 *Academy of Management Review* Decade Award for his article "The Essential Impact of Context on Organizational Behavior," recognized as the one *AMR* article that has garnered the most citations over the past 10 years.

Silvia Bonaccio, director of the new Telfer Doctoral Program at the University of Ottawa, was awarded the Patricia Ann O'Rourke Award for Excellence in Service by the Telfer School of Management.

Transitions, New Affiliations, Appointments

Stephen Colarelli of Central Michigan University is spending the academic year at Hong Kong Baptist University's School of Business as a visiting professor of management.

Kevin Murphy will join the faculty of the University of Limerick as the Kemmy Chair of Work and Employment Studies in the Department of Personnel and Employment Relations in the Kemmy Business School.

Lynda Zugec, managing director of The Workforce Consultants, has been appointed as the chair of the Canadian Society for Industrial and Organizational Psychology (CSIOP).

Good luck and congratulations! Keep your colleagues at SIOP up to date. Send items for IOTAs to **Tara Behrend** at behrend@gwu.edu.